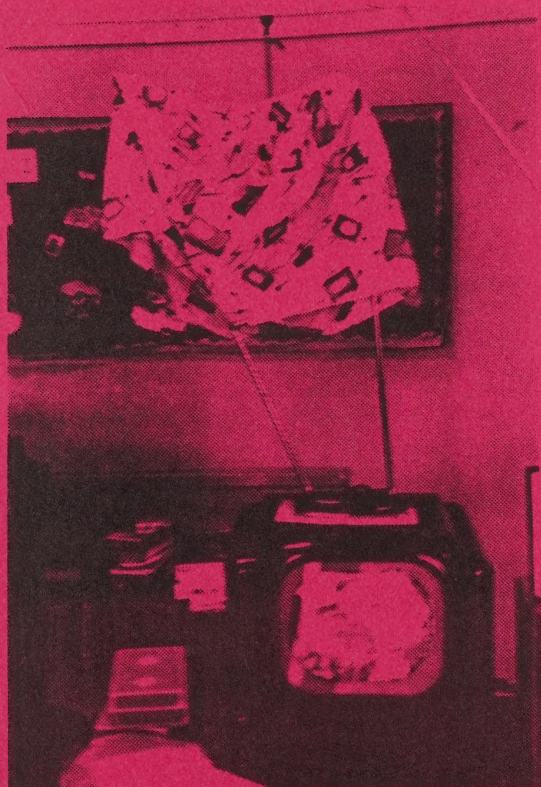


405 ALIVE

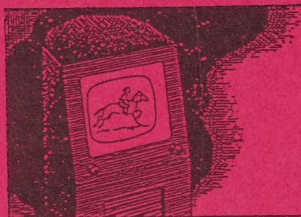
RECALLING THE GOLDEN YEARS OF BLACK & WHITE TELEVISION

ISSUE 19, Summer 1993.

Editor Andrew Emmerson, G8PTH



Yes, these are Bill Journeaux's 1950s-style 'teevee' underpants! What a sight! He says he wears them to keep his trim, boyish figure but we didn't dare investigate further ...



FROM THE EDITOR ...

How do you know a teenager lives in the house? Answer: The clock on the video recorder isn't flashing 00.00.

Why do today what you can put off until tomorrow or as they say in Germany, *Morgen, Morgen, nur nicht heute, sagen alle faulen Leute.*

OK, you asked for it!

Yes, here's another 100-page issue. It has bust the budget but hang the expense, we'll balance the books next year (subtle way of warning you that you'll pay for it later!). So much good material for feature articles is coming in now that it will be quite impossible to confine this year's issues to one 100-page and three 64-page issues that you paid for. Oh yes, it's a bit later than we all expected but as you will see, your editor has been trying to improve the overall appearance by learning desktop publishing. The 'learning curve' is a slow one but things are starting to make sense. It should get better next time! Apart from this particular issue, *405 Alive* will increase in size too! Starting issue 21 (next year), every issue will contain 100 pages (at least). We hope this meets your approval!

Now a reality of life. For those of you who pay by credit card we must inform you with regret that these payments will in future be subject to a 5 per cent surcharge. The bank has recently increased its charges for handling these transactions and whilst we have absorbed these fees up to now, it doesn't seem right that everyone should in effect subsidise those who pay by credit card. So you now have a choice, the normal price for cash or cheques or a 5 per cent surcharge for credit card payment. This 5 per cent, incidentally, is effectively what the bank charges us (4.8 percent). We make nothing on it, especially when you learn that with credit card payments we don't see the money from the bank for between one and two months later, so plastic is not a fabulous money-spinner for us. The option to pay this way does represent a service to readers, though, especially for our foreign subscribers and for people who like to pay for their purchases with one cheque monthly.

More news: this magazine has now been granted an ISSN number. This, like an ISBN number on a book, means the publication can be identified internationally and puts it on an even more established footing. It's support from readers like you that makes this all possible, and long may this continue...

That's the end of the admin. messages. Now, down to the real editorial. The year 1993 will be remembered as the year collecting television artefacts took off. To

begin, we had the first ever affordable 625 to 405 standards converter from Pineapple Video, followed by Michael Bennett-Levy's magnificent book on early television receivers. Now two London auction houses have held sales majoring on vintage television and both promise to repeat the events.

Remember when vintage radio people said we were mad to collect TVs and how they had no serious value? Ha ha ha! They are having to eat their words now. But where do we go from here? It's nice to have people at large recognising the value in what have been saying and doing for ages, nice too that they now agree that television is a legitimate field of collecting and study.

Does it also mean that prices will go up? Yes, inevitably, so now is the time to secure those 'rarities' you are (well, may be) after. This does of course mean that far more interesting old relics will start to come out of the woodwork, so it's not all bad. By the same token, it also means that your established collection (if you have one) will start to appreciate in value more rapidly. So hang on in there... three years ago people said we were all mad and now they say how astute we were for recognising trends!

Later in this issue you will see a report of the Phillips auction of early television equipment. The prices raised there compare fascinatingly with those fetched at a Christie's auction on 20th December 1984 (less than ten years ago). A kit-built Baird Televisor went for a not unexpected £1,100 but... an HMV mirror-lid set achieved a paltry £35 and an 8" Ekco no more than £15. I suspect you would probably only triple the price of the Televisor today but the Ekco would easily fetch 20 times the 1984 price. Where is it all leading? It's futile to say the subject of auction prices is of academic interest only!

What's next to become respectable? Try early video machines (reel-to-reel, cassette, cartridge and even the ill-fated EVR technology). Keep a watching brief on TV sales literature, programme papers, magazines and annuals. Outside the television field it is inevitable that older examples of audio (hifi) equipment, pocket calculators and home computers will also rise in value and collectability. Just mark my words!

Andy Emmerson

NEXT ISSUE

The next, and last, issue of 1993 will be number 20. It is planned to bring this out around October or November (probably the latter!). Articles, letters and advertisements should be in by the end of September, thank you. Several articles squeezed out of this issue through lack of space will appear in this next issue.

Letters, we get letters ...

405 Alive welcomes your letters, which may be edited for clarity and space reasons. Any letters or parts of letters not intended for publication should be marked as such, otherwise we'll publish and be damned!

From Roger Bunney, Romsey:

Re the last 405 Alive but one, the mention of the early Isle of Wight reception, the BBC TV reception was at Northwood, Isle of Wight; this is on the road between West Cowes and Newport and is the highest habitable part of the island.

During my final days at TVS I was talking to Shaw Taylor - he served at RAF St. Boniface at the Chain Home radar station atop St. Boniface which I gather was the most furthest west CH station (I stand corrected on the last point). He commented how they used to be standing at the station and the VIs would come buzzing over between the pylons. I expect you recall the "Take Your Pick" programme with Michael Miles. In about 1970 the ITA got amongst that type of programme and it appeared as "Wheel of Fortune" in colour and all of these were recorded at Southern. I was *the* boom operator. Michael suffered epilepsy and always wanted to retain the same crew for confidence reasons. Bob Danvers Walker used to detail all the prizes and there was Harold Smart on the organ. Always had Autocue despite each show being a mirror image of the previous one.

Happier days, best wishes.

From Dr Andrew Elphinstone, Saffron Walden:

The magazine's great - I never fail to be impressed by how much there is in it. You're doing a great job. Any articles on the insides of TVs and the developments in circuit design would be much appreciated. Keep it up.

From Tony Gamlen, Hartlepool:

Thanks for my copies of 405 Alive which arrived this morning. I wish you to know I'm highly delighted with the magazine's content - the mix is just right. In fact I found them so riveting I found myself reading them standing up, a few feet from the letterbox.

I am heartened to see so many people interested in 'our' cause; I really thought I was alone until I heard of, and met, David Boynes. For years it was a constant battle with people who thought you were mad buying and restoring vintage TV, radio and audio, for the love of the equipment. TV has been my main interest since I started in 1959, although I'm also interested in old records and music, vintage watches and horology, vintage cars (I have two at present, a 1961 Austin Cambridge and a 1966 Morris Oxford, both in good condition).

By the way, I vowed in the beginning I would never do this for money, as I think once you do, the hobby is destroyed.

Some interesting points there Tony. Several of our readers are also into vintage cars, even vintage commercials and buses! Anyway, welcome aboard and join the club...

From Norman Newbould, Cambridge:

After spending some considerable time designing my own standards converter with reasonable success, lack of time prevented me from completing the project. This led me to purchase a converter from Pineapple Video. The converter comes well packed with a comprehensive manual and circuits. It has been in use for about a month and no problems have been encountered yet. The picture quality is excellent. Considering the cost of some of the chips the price of the converter is very reasonable, and I highly recommend it.

Happy viewing.

From Grant Dixon, Peterstow:

Many thanks for the copies of 405 Alive with my pictures. Please note that when the 1937 Coronation took place I was *not* a schoolboy! I was 21 years old and had taken my finals at

Cambridge!

From Philip Howard, Bournemouth:

Bravo rules, OK?

Yes, and in this household too. I've tuned in my satellite receiver and I'm just hooked on Scotland Yard, Mysteries of Edgar Wallace and Saber of London. I'm not quite sure about Car 54, Where are You? and as for Torchy The Battery Boy, well, it's just as yukky as I remember it! What did APF stand for anyway? was it Anderson Pelham Films? I see the puppets were made by Pelham and Gerry Anderson was doing the special effects, etc. [AE].

From Peter Arrowsmith, Rushden:

Thank you for the sample copy of **405 Alive**. I have not yet decided whether to subscribe; however, I was interested

in the brief piece on TV presentation material. There were two very good films of local scenery (a lot shot from helicopter) used in ATV's start-of-day sequence in the mid/late 1970s. They were filmed by a Gary Hughes and accompanied by music (including vocals) called 'Odyssey' by Rain. The 7" record number is BRAD 7403 on Bradley Records. But I imagine you know all this already!

Oh no we don't! If anyone has a copy of this film sequence and send Peter a copy, please write to him at 39 Oakpits Way, Rushden, Northants., NN10 0PP.

From Terry Martini, London:

I would like to hear from any collectors of obsolete video tape formats (of which I have many) for exchanges of ideas, servicing tips, spares and data. I have also made available a wants list for VTRs and associated equipments which is free to anyone interested. You can contact me on 071-790 6807 or fax 071-702 8774.

This sounds a very good idea, making a kind of forum for people who wish to swap bits of VTRs and so on. Thanks for making this available, Terry. Terry also raises an interesting question about tape deterioration later in this issue.

From David Laine, Doncaster:

An interesting new series of video-tapes is 'The Coronation Street Collection' from Time-Life Video. The picture quality is superb but these are not so much old episodes as themed treatments of individual characters in the programme, with extracts going back to when they first appeared in the programme. Each tape, which is made in collaboration with Granada, lasts 90 minutes and costs £11.99. There's a free signed photo of Rita and a diecast Coronation Street souvenir van too. You can get these tapes only by mail order; write to Time-Life Video, P.O. Box 77, Liverpool, L70 1JD.

I've recently got hold of the VR813 video recorder from Philips. This is a S-VHS machine and it's superb. I put in an ordinary VHS tape I recorded back in 1980 and playback is so stable that I can read all the teletext pages on the TV screen. It's like having your own personal time machine!

From Larry Coalston, Totland Bay:

I retired as a Telerecording operator in Telecine and Video-tape department Television Engineering, BBC Television Centre Wood Lane, London in late 1985 but before that I worked for a time under the direction of George Hersee in a team of engineers installing the original colour studio equipment at Pebble Mill.

In the 1950s I worked in London Tel. OBs., and Bristol and London studios and would be very interested to hear of the present day whereabouts of a complete (working ?) 405 line OB Van known to us as a 'Scanner'. I remember the first transmissions of *Blue Peter* from Lime Grove using the old Emitron equipment which 'peeled off' to peak white on excessive highlights and also the early days of BBC2 625 line monochrome when the cameras (4 1/2" Image Orthicons) had to be completely lined up very carefully, every hour or so. The settings were of course very different for the two standards.

All this television history is a far cry from today's sophisticated use of digital technology and a future HDTV system, but I think that the dedication and hard work of all those who made

contributions to the success of yesteryear's television does justify some recognition.

From Gordon Sharples, Flixton:

My latest mag is another bumper edition! I got two pages 18 and two pages 47, is this a bonus?

Yes, but don't tell the others, they'll all want extra pages! And the printer will want more money!

Also, the portion of Test Card C on the front cover is upside down! White block is at the top.

Glad you spotted our, er, deliberate mistake. Seriously though, if anyone has a defective copy of the magazine (with pages missing or damaged), we'll replace it and refund postage. We don't take money on false pretences.

From Bob Jones, Croydon:

Many thanks for another excellent magazine. The article about reforming capacitors was particularly interesting to me, especially using a variac.

I bought a variac a couple of years ago and I have found it a most valuable piece of workshop equipment. It was definitely a good investment.

Thank goodness there are people around who take an interest in preserving the past, otherwise things would be lost forever, whether they be buildings, steam engines, vehicles or radios and TVs (including the programmes that were transmitted). The list could go on for pages.

It seems a shame to me that these days, large organisations don't care about their own past if it does not show a financial return. Money has become god. So we are very unique and important to our Great British heritage and traditions. Well, that's the end of the speech. All the best.

From Martin Loach, Abingdon:

Your comments on page 4 about *Television* magazine number 1 are, I believe, not quite the case. The reason number one of any magazine appears in booklists is because the demand and the highest price applies only to number one, as magazine collectors only really want number

one! In fact the first is also usually the most scarce, as initially people were not all aware of its existence, and missed it. *Television* mag no. 1 is indeed scarce, and you pay the price if you buy from a dealer. As an example, my father had many of the first ones, but only from number two onwards.

I agree with the comments from Brian on "Timeslip". Often one can be disappointed with the review of old programs seen as a child (although I was somewhat beyond that when I saw it in 1974) but this one seems as good as it did then. It seems to have a quality of accuracy and plausibility often lacking now. I remember this was shown during a time of my interest in wartime radar and old military establishments, and I wrote to ATV (I still have the letter) asking where the location was. I visited the chicken farmer in residence there and took some photos, but it was in reality an anti-aircraft battery in Hertfordshire with some interesting old underground control rooms.

The other thing mentioned in ATV's letter was the answer to my question as to if one could buy old TV films no longer shown! The problems of complicated copyright were held to make the release of old material impossible. How interesting that things change sometimes for the better. I never believed I might have "Timeslip" on my shelf. Soon after that in 1974 I bought my own VTR, thus enabling me to avoid the problem in future!

From Malcolm Burrell, Eindhoven:

I was intrigued by Dicky Howett's cardboard 'Mk I' camera. I did the same at an early age, except mine was made from a crate that I tried to balance on a broom handle! It was modelled on the Mk III.

From Timothy Ward, Aberystwyth:

Out of interest, does *405 Alive* have any plans to put out a magazine on video - on 405 lines of course - or any other features for that matter? I would be glad to offer my services to help. I have a 405-line broadcast camera as well as 625 to 405 converter and ex-broadcast equipment. If anyone is interested please let me know.

Great idea, Timothy. I suppose some people

would prefer it on 625 lines until they get their 405-line sets going. The answer is yes, a project for "405 Alive, the Movie" has long been in gestation but hasn't got much further. The ideas are there, just the production has been lacking. Are there any creative scriptwriters and directors out there? Let us know. We can help with the finance and ideas for subject material...

From Harry Matthews, Bo'ness:

Our museum (the Museum of Communication in Bo'ness) is going well and is taking part in the International Science Festival, celebrating 70 years of broadcasting and 60 years of TV. The "Foundation" are manning the display, pushing around the Mk 9 cameras and showing a pink picture on the 30-line TV and so on... enjoying themselves, a good crowd. Why not come up and see us?

Good idea - more details are on the Television Newsreel pages.

From Michael Barrett, Putney:

I enjoyed the last edition, with the photograph of myself and son reproduced. I see that someone has pre-empted my proposed letter about the EMI C.P.S. Emitron cameras in Lime Grove. I remember them until the middle 1960s.

From Brian Mitchell, Cliffe Woods:

Thank you very much for the specimen copy of *405 Alive*. It's really great and there's still lots to read! Will you please now sign me up for a subscription, also supply volume 1 reprint, also photocopies of.....

Now that's the kind of letter we enjoy receiving!

From Steve James, West Bridgford:

Recently acquired a rather fab two-tone green 1966 Victor estate- an exceptionally capacious beast, whose speciality is swallowing console TV sets, radiograms and other junk I used to have a good excuse for not having! Looks rather American and features "Magic Mirror" paint (!) Think it's love at last for me, although someone at work remarked that it looked like a hearse.

And now, a quote from Marty Feldman, as heard on "The B Side", a 1968 Decca single.

"Tony Blackburn has false teeth! No, he hasn't really - the teeth are real, it's the rest of him that's false! Tony, if you're listening, I'm only joking... If you're not listening then I mean every word. Radio 1's lots of Fun... but it gives you a migraine!!"

I get the impression that Radio 1 was not well received in its infancy!

Cheers for now.

From Philip Taylor, 14 Willow Walk, Canewdon, Rochford, Essex, SS4 3QH:

I read an issue of *405 Alive* whilst visiting Rudi Sillen in Belgium lately. Rudi has a collection of TV sets, as you may know, including two pre war models - lucky bloke! I found 405 an absorbing and informative read.

I was flattered to find myself included as a source of valves - I do still have a lot of new stock and am willing to swap or sell, but the phone number listed was an old one. We have gone electronic and now have a Southend on Sea number - 0702 258598. I have a stock list which is kept reasonably up to date, but note that I do not have large quantities of any one valve.

Billington Valves was listed too. His phone number has changed as well. He is now in Billingshurst, west Sussex. I do not have his new number but his old Horsham number, which is 0403 865105 and 865108, may well still have a diverting message on it.

Whilst I have one early TV - the Pye AC/DC model using fly back EHT, which I believe was the first to use this method of EHT generation, my main interests are early short wave c. 1930 and "classic" hi fi from the 30s onwards. I have a good selection of service information for domestic radio, plus some communications receivers, and have a selection of information on pre war TV, including Pye, GEC and EMI products. Domestic radio information runs from the early 30s to the 60s and included company manuals as well as Trader etc service sheets.

PS: Please note that Billington Valves is now called Billington Export. He has a minimum order of £50 I believe.

Correct

From Eric Partridge:

Following a number of years of exhaustive research, a literary tome is due to be published within the next twelve months on the endless subject of children's television.

It is intended to produce the work as an eminently readable chronological and timeless account of every children's programme that has ever been transmitted, together with a comprehensive listing of programmes, transmission dates, repeats, cast and production lists etc. etc.

It will also include a personality profile listing which hopefully will feature every cast member who has ever appeared on children's television, making it the most comprehensive reference work ever published on the subject.

Many personalities connected with the development of children's television, particularly in its formative years have already been interviewed and will feature. However, if any 405 Aliver knows of or indeed have themselves been connected with children's television in whatever form, presenting, planning, producing or working diligently behind the scenes etc and they do not recall having spoken to me on this subject then I would be delighted to hear from you.

I am also keen to obtain any personal photographs for possible inclusion to give the whole work a more 'homely' feel, as it would be far too easy to simply cram it full of standard library and PR shots. I am also particularly interested in any sharp, good quality full colour pictures of vintage television receivers themselves to create a theme for the book's cover.

All offers of help gratefully accepted.

Eric Partridge, Suite 207, Sherbourne Mill Studios, Morville Street, Birmingham B16 8DG.
Tel: 021-454 4454. Fax: 021-455 8038 Home
tele: 021-707 8335.

From Barrie Portas:

I may soon have the chance to buy a Philips video disc player; the same person also has a Hitachi video disc player with around sixty discs. He didn't say you put the disc and cover into the

player, perhaps someone will tell me how these work (0472- 824839).

Seen advertised in *Exchange and Mart* during March: RGD mirror- view television and radiogram, £250. Could this be pre-war, or would it be late 1940s like the Ekco?

From Nigel Morgan, High Wycombe:

Thanks for the latest issue of *405 Alive* - once again another cracker.

The article on the Philips G6 colour set started the grey matter going: I used to work on those sets, and by far the most common cause of no colour were those horrible grey or brown "DUBLILIER" 2 watt plastic- bodied resistors which I think from memory supplied the screen grids on the reference oscillator and burst discriminator valves (EF80/85/183/184/PCF802/ECC81 if my memory serves me right). These were notorious for going high resistance. The sub-miniature pot in the burst discrim can was another favourite. This decoder was a swine to fault-find on, and many intermittent colour drop-out faults were corrected by a complete re- alignment of the decoder.

Something is nagging at the back of my mind about a supply from either the PSU or line output stage being either low or missing causing low sound and no colour: or possibly an I.F. problem. There was a "Colour killer threshold" pot which also caused problems: a tweak on this may cure the no colour. Sorry this is so vague, but it's been 15 years since I last saw a G6. I seem to remember that the LOPTX was the same for both dual and single standard models, the only difference being that on the dual standard version there was an extra Xth harmonic tuning capacitor added (something like a 4700pf 5KV).

Also, on one of the two plugs, all the wires had to be moved one pin either clockwise or anti-clockwise. I found this out the hard way one afternoon when confronted by a smouldering LOPTX in a G6 only to find that I had the wrong LOPTX on the car! I still remember the joy when the set burst into life after making the necessary modifications. It transpired after contacting Philips that they admitted the actual

bobbin was identical, but the connections were slightly different.

From Grant Dixon, Ross-on-Wye:

The item on page 77 of issue 17, although primarily concerned with radio, could be read as covering the TV broadcast as well. I think the 1937 Coronation was the first television outside broadcast *over a distance*. Other OBs had been things like gardening programmes from the grounds of Alexandra Palace.

From David Laine, Doncaster:

Although not exactly vintage programming, "The Forsyte Saga" ran in the 405-line days and is now available on tape at a special price. The complete series is available on eight tapes in a slipcase from branches of W.H. Smith and is a "W.H. Smith exclusive". My wife and I have enjoyed watching these programmes again, and they are all as transmitted, with no captions added. Perhaps they came from 2" quadruplex tape.

From Jürgen Valter, Aachen-Brand, Germany:

I am writing to say the standards converter, which Wilfried Meier got for me from Pineapple Video, is functioning very well.

From Wilfried Meier, Kevelaer, Germany:

The ten units I ordered from Pineapple Video arrived here safely and work without any problem. I am astounded how the firm can make them at this price. They are constructed very well. The others are of course for other collectors. The unit works equally well with a 441-line receiver (Philips TX390). One of these Pineapple devices has gone to the Berlin Museum of Transport and Technology.

From John Fox, Maidenhead:

I'm grateful to Allan Keeling for reminding me of 'Mr Piper' and its rather odd, hotch-potch of children's items. I remember it being run at 5.25 p.m. on ATV and Granada on the same day of the week, although different programmes were always shown in each region.

And I seem to remember that in the TV World days of ATV Midlands they had quite an

affinity with 'Flipper' - it seemed to run for years longer than in other regions (also at 5.25).

Does anyone remember that when 'Fireball XL5' and 'Stingray' were shown in the Granada region, the songs and closing titles were never run? Instead they cut straight to the usual 'A Granada Presentation' caption. Was it because they didn't want us to see 'in association with ATV'? - or just to get an extra 30 second commercial in? Did any other ITV companies cut these songs/captions?

LUNCH BOX. As a trade-test fan I had mixed feelings about this lunchtime interruption of the test-card! There was a time when it was preceded by a 'Thought for the Day' at 12.45; the programme then ran from 12.47 to 1.22. Unlike most ITA transmitters which carried trade-tests all day from 10.00 a.m., the Lichfield transmitter then closed down till 2.00 p.m. - this meant that on 'Lunch Box' days the test-card disappeared at 12.30 and thus three trade-test LPs never got an airing, all for 37 minutes of programming.

From Steve Bennett, Coquitlam, British Columbia:

Thanks for the magazine. I find that when 405 Alive arrives I can't help reading all of it immediately.

I was interested to read David Looser's and Jeffrey Borin's article about the 625 to 405 standards converter and would like to get a copy of the circuit information. I do have quite a lot of 625 line tapes so conversion to 405 would be useful. I wonder if I could get most of the control and interpolation circuits into a Xilinx FPGA. These software-programmable hardware chips have made it possible for us to get custom IC complexity in small quantities at low cost. Of course what I need to design is a 525 to 405 and 819 line converter although there isn't much on worth watching here despite the enormous number of available channels.

While looking through my collection of magazines and cuttings found a few interesting items which I think other 405 Alivers might also enjoy.

1. A couple of advertisements from *The Times* of November 1936 (held over until next

time).

2. A review of the opening of the Ally Pally service from *The Times* of 3rd November 1936, the day after. The writer noticed the difference in definition and flicker between the two systems although only on studio material not film. (Not quite clear enough for reproduction but we'll happily send any reader a photocopy in return for two first class stamps.)

3. A note on Television Servicing from *The Wireless Trader* of November 1936. I especially like the comment about complete lack of screen and the customer suffering from shell-shock! (Follows.)

4. An article from a recent *Financial Times of Canada* about the investment value of the really old TVs. The writer phoned me when he was preparing the article and we spoke for a while. I gave him a lot of technical and historic information but his brief was to write about the investment potential. (Two faint to reproduce but photocopy on request, send two first class stamps).

From THE SUNDAY POST, 23rd May 1993

Your old telly could be worth a small fortune

MICHAEL BENNETT-LEVY, Old Craighouse, Musselburgh, is a telly addict with a big difference.

He has one of the world's finest collections of pre-war sets, all of which are becoming valuable collectors' items.

He also collects all sorts of items to do with television, from cameras to early video recorders.

Michael, an antique dealer, used to wonder why so few old TV sets came on the market.

He discovered pre-war sets are extremely rare, as only Britain, America and Germany produced them. In fact, only several hundred are still around.

He bought his first old TV two years ago and is now an expert in the field—and the proud owner of 15 rare televisions.

Although none works, Michael

carefully restored one model to prime condition to show pre-war films at this year's Science Festival.

He's hoping people will come to realise the great historical significance of the first TVs.

After all, as he says, television is the most important technology of the 20th century and has shaped the world.

Michael also points out pre-war sets are far rarer than the Stradivarius violins which fetch colossal sums.

SINCE HE started collecting, the price of each set has been rising. The last one sold in London for £2500.

He's sure quite a few old tellys must be lying in houses all over the country, just waiting to be discovered, and his new book, "Historic Televisions and Video Recorders", will help any fellow enthusiasts.

So check your attic. You might just have a valuable piece of history on your hands.



■ MICHAEL, with one of the first generation of ATV cameras built in 1954 and a 1970s TV built to commemorate the first space landing.

RADIO MAINTENANCE

INCORPORATING 'TRADER' SERVICE SHEETS

THIS ISSUE INCLUDES
SERVICE SHEET NO.:

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K-B MODEL 580
BATTERY SUPERHET

162

McMICHAEL 368
BATTERY SUPERHET

TELEVISION SERVICE WORK

WITH the "arrival" of television in the sense that B.B.C. programmes are now being broadcast daily, and sales of receivers are commencing, the problem of television service must, unfortunately, be considered.

We say unfortunately, because it has already been made evident to us that television receivers, in spite of their present more or less individual production, are apparently going to be prone to faults in much the same way as radio sound receivers.

If ten years' experience has not sufficed to teach manufacturers to produce a trouble-free sound receiver containing only, say, four valves, we cannot expect that a television receiver incorporating twenty to thirty valves will be immune from breakdown.

At the moment the question of television service work is rather in the air. The feeling of manufacturers seems to be that at present the volume of sales is so limited that service work can be carried out by their own trained engineers.

We do not think that any scheme in which the manufacturer will only permit his instruments to be serviced by his own engineers will ever be successful in the long run. That, at any rate, is our opinion, but we should like to have readers' views on the subject.

It seems to us that there may eventually be two classes of television dealers. The first, consisting mainly of small firms, would probably carry one receiver for demonstration purposes, and pass on orders received to the manufacturer, receiving an introductory commission for this work. The second class would comprise larger dealers who would be prepared to demonstrate, sell, install, and service instruments.

It is fairly obvious that in the first case the manufacturer would have to carry out his own service work, but in the second the dealer would have full facilities for service, and should receive the help and encouragement of the manufacturer in this connection.

It is interesting to see how a television receiver differs from an ordinary radio set from the service point of view.

Television Fault Finding

In the first place, it is obviously much more elaborate, owing to the larger number of valves necessary. It so happens, however, that the complete television receiver may be divided quite logically into a number of different sections which are often built into separate chassis, with inter-connecting leads.

While it is true that the whole receiver, if built into a single chassis, would look rather a frightening proposition, the multiple chassis form of construction, enabling the receiver to be tackled in sections, is much less formidable.

Generally speaking, there are, first of all, the sound and vision receivers, which are sometimes combined into a single unit. The output from the sound receiver feeds a loud-speaker, as usual. The output from the vision receiver contains the picture and synchronising signals, which are separated. The picture signals are fed to the modulating electrode of the cathode ray tube, while the synchronising signals go to control the time base units.

The time base units are generally built into a separate chassis, and provide the deflecting voltages for the horizontal and vertical deflector plates of the C.R. tube (where electrostatic deflection is used).

The C.R. tube itself must be fed with supplies for its heater, and for its various anodes. All these supplies usually come from another separate chassis, the power pack, which in addition often provides the various supplies for the receiver and time base chassis.

Symptoms of Faults

We have thus divided the complete equipment into sound and vision receivers, time base chassis and power pack. By noting the image (if any) on the C.R.

tube screen, one is generally able to narrow down the fault to one of the chassis.

For instance, if the "raster" or lined background is received, but no picture, then the vision receiver has probably failed.

A single bright spot on the screen indicates failure of both time bases. A bright horizontal line indicates no voltages on the vertical deflector plates, and vice-versa. No raster and no spot on the screen shows that either the power pack has failed, or the tube heater is burnt out. It need hardly be added that complete lack of screen, and a customer with mild shell-shock, indicates that the C.R. tube has "imploded"!

Seriously, though, the above faults, even if they are simple ones, give some idea how the trouble may be narrowed down to one of the chassis.

After this, it is a question of following out the various circuits carefully, measuring voltages, and checking condensers and resistances much as one does with sound receivers.

A Word of Warning

Great care must be exercised in dealing with the power pack and, to a lesser extent, the time base chassis, since high voltages are encountered here. Rubber gloves and a rubber mat are advisable, and all tools should be very well insulated. Voltages of 3,000-5,000 V. are often met with, and it must be remembered that "flash-overs" are easily produced. After switching off the receiver, it should never be handled until all the high voltage condensers have been discharged.

To those who are really interested in service work, television service will open up some very intriguing problems. At the moment, its field is not sufficiently wide for us to devote considerable space to it, but as it grows, we shall cover it in the same way as we now deal with ordinary sound receiver service.

Television Newsreel

TV HEAVEN OPENS

Old television programmes never die. They live on in the memories of those who viewed them. But only a very few reach the status of reincarnation: of being marketed as a video release. The others remain largely unviewed. Until now.

As from this summer, Europe's first permanent "TV Heaven" will be established in Bradford when the National Museum of Photography, Film & Television launches a new television library to mark its tenth birthday on 16 June.

This new library of classic British television programmes will be the nearest thing to a TV Time Machine yet devised. Currently, the only place where a member of the British public can view a wide range of British TV programmes from the last four decades is in New York - at the USA's National Museum of Television and Radio.

TV Heaven will redress this: it will be a library of the most popular, influential, entertaining or historic programmes, designed to be played in range of custom-built consoles. Visitors can choose their title from a data-bank; videos will be handled by Museum staff only, and relayed to individual viewing areas. Designed as a resource for serious students and interested passers-by alike, there will also be an area for a scheduled programme, playing representative material from a year in television history, for the casual visitor to the Museum. Via this television "time machine", the viewer will be transported back to sample a programme c. 1953, 1962, 1975 - or whichever year is playing today - with a prototype drama, soap, documentary, selection of commercials and children's offering of the time.

The Television Heaven project received initial research funding, totalling £75,000, from the Independent Television Association when the Museum first approached them with the idea in 1989. Now, we are inviting the BBC and 1TV to collaborate in the compilation of a core of programmes - 1,000 by the time the library opens in June 1993, rising to 10,000 over the next few years, to give a cross-section from the golden era of British TV. Programmes will be drawn from BBC 1 (from 1950 to present); ITV (from 1955); BBC2 (from 1964); Channel 4 and S4C (from 1982). These will bring back nostalgic memories for the Museum's 750,000 annual visitors and offer an unrivalled research facility for students of the media.

For further information on TV HEAVEN at the National Museum of Photography, Film & Television, ring 0274-727488.

MISSING, PRESUMED WIPED

A one-day conference on the theme of lost (and found) programmes is planned for Saturday 2nd October. Full details are yet to come but people are marking their diaries already, as it promises to be a first-class affair. Organised by the BFI (enquiries to Veronica Taylor on 071- 255 1444. The venue is expected to be the National Film Theatre at London's South Bank Centre.

PHILLIPS AUCTION (See also Dicky Howett's article, *Sale Away*)

Too late for publication in our last issue we received a glossy colour catalogue from Tony Jones, who runs the mechanical music, radio and television side of Phillips, the London auction house. This related to a sale on 11th May, in which several pre-war and early post-war TV receivers were sold, also a pair of EMI 201 vidicon broadcast

cameras previously on display at the Beale City exhibition in Liverpool. Items you (presumably) missed included: HMV Model 900 mirror-lid TV/radio, Decca model 1000 projection TV, Marconiphone model 703 TV and radiogram (stated to be one of only eight manufactured), GEC bakelite brown and cream model BT2147 TV, Bush TV22, another HMV model 900, Marconi model 707 TV/radio with modified octagonal screen cut-out, Sobell model 107 TV/radio, Baird scanning disc from commercial kit.

Tony intends to build up the early TV content of future sales, so readers intending to attend these should contact him now.

Tony Jones, Phillips Bayswater, 10 Salem Road, London, W2 4DL. Telephone: 071-229 9090 ext 214. Fax: 071-792 9201.

ACADEMY PLANS ANOTHER VINTAGE RADIO, TV, GRAMOPHONE & TELEPHONE AUCTION

Following the success of its recent vintage radio, TV, gramophone and telephone auction, Academy Auctioneers & Valuers of Ealing, is planning another similar event, 'by popular demand'.

Set for September 14, it will be staged, this time, at Academy's own auction rooms and further details will be announced in due course. In the meantime, vendors wishing to enter lots in the auction, are asked to get in touch with Academy Auctioneers and provide as much detail as possible.

Academy's previous sale, which was held at Shepherd's Bush, London, on March 21, was believed to have been the largest auction of its kind, encompassing over 500 lots, all from one theatrical prop company. According to Tony Dixon, Academy's senior auctioneer, however, the September event is expected to equal it for size, although this time, most lots will be coming from private vendors. For more details, catalogues (early September), stay tuned.

Academy Auctioneers & Valuers

Northcote House, Northcote Avenue, Ealing, London, W5 3UR.

Telephone: 081-579 7466.

Fax: 081-579 0511.

SCAM ALERT

Both the British Vintage Wireless Society and the Vintage Radio Circle have advised their members that a club for vintage radio and TV collectors from Lancashire is a fraud and that they are soliciting money for items which do not appear. It is also alleged that the police are now investigating this organisation. We report this without further comment and without full knowledge of the facts, merely suggesting that members always satisfy themselves before parting with money on *any pretext*.

NEW (OLD) ITC RELEASES

Inheritors of the ATV archives, ITC Home Video are releasing a host of tapes this summer, including episodes of 'Hawkeye and the Last of the Mohicans', 'Space:1969', 'The Persuaders', 'Sapphire and Steel', 'Timeslip', 'The Zoo Gang', 'Thriller', 'Department S' and 'Randall & Hopkirk Deceased'. Even better, they are also releasing six bargain 180-minute sampler tapes at £9.99, entitled 'Classic TV Heaven'; each covers one of the decades the 1950s, 60s and 70s and the contents look extremely promising (if you like this kind of thing!). Also, if you can afford it, the latest

information on these programmes can be had by dialling 0898-333482.

By the way, ITC seem to have heeded enthusiasts' pleas for authenticity now. Your editor has bought some of these tapes and is delighted to see that they have not had their titles butchered. So 'The Power Game' ends properly with 'An ATV Production', 'Danger Man' has the ATV emblem at the close and there are several variants of the ITC animation to be seen. Well done!

Postscript: The reaction to these has been so good that ITC are releasing more of these 'TV Heaven' tapes in the autumn. Can't wait!

OLD SETS REDISCOVERED

David Newman kindly sent in a photocopy of a pre-war radio and TV trade catalogue which illustrates several British TV sets not previously noted. They include a 12" screen console set and a small-screen 'addon' set from Philco and a number of sets bearing the Brunswick name. I assumed that Brunswick was an *alter ego* of GEC, because both Brunswick and GEC sets had model numbers beginning BT (presumably for Brunswick Television). It was common practice for manufacturers to have two brand names (e.g. Philips and Stella, Pye and Invicta) which allowed them to supply nearly identical sets at varying prices by giving them different names and brand images. This also allowed the manufacturer to grant two exclusive dealerships in the same high street. I assumed, therefore, that Brunswick was a clone of GEC but Mike Izzycky advises this is probably wrong: the Brunswick brand belonged to Decca. So perhaps GEC made TV sets for Decca, although it appears that the BT prefix was in use from an early stage.

In any case, Michael Bennett-Levy has been informed and he will be including details of these sets in the supplement to his 'Old Televisions' book that he will be bringing out in the new year.

REPLACEMENT LOPTs FOR TV22

Andrew Beer rang up to say he was arranging to have made some replacement line output transformers for the Bush TV22 receiver. If you are interested, please ring him on 0245-468958.

VALVE SUPPLIERS

Grumbles have been reaching me about the slow speed (six weeks or more) of despatch of pre-paid orders by a well-known supplier of vintage radio equipment in the West of England. They are also debiting credit cards on the day of order, then taking well over a month to supply so we have removed their name from the recommended suppliers list. It is therefore useful to know there are other, more reliable (and often cheaper) sources of supply. The Market Place section of this magazine always contains the numbers of all known valve suppliers, and I have found Colomor in London to be prompt and economical.

Our letters section contains a note from Philip Taylor saying he can still supply valves (Steve Ostler of Radiocraft recommends Philip highly) and I have just received a detailed catalogue from Sound Systems of Suffolk, who stock a wide variety of valves at realistic prices. They also have a separate catalogue (the "clearance list") of electronic sundries, many of which are from the valve era. These catalogues are £1 each post-paid. Cheques payable to W. Burcher, c/o Sound Systems of Suffolk, 111 Felixstowe Road, Ipswich, Suffolk, IP4 1JB. Phone 0473-721493.

If you wish to praise or criticise service from suppliers please let us know; it will be helpful to other readers.

QUATERMASS II

A well illustrated and very detailed article on this classic science fiction serial screened by the BBC in 1955 has appeared in *TV Zone* magazine. The article gives an episode-by-episode synopsis of the plot plus cast lists, transmission dates and so on. You can order this issue by post if it has sold out in your local papershop or you could try a branch of Forbidden Planet if there's one near you. The issue concerned is *TV Zone* Special number 10, *Earth Invasion Special* and it costs £2.95 (plus 80p postage and packing by mail) from *Visual Imagination Ltd., Box 371, London SW14 8JL*. This issue also has articles on more recent sci-fi programmes, such as *UFO*, *The Tripods* and *The Tomorrow People*.

YORK CASTLE MUSEUM

The new colour leaflet for this popular attraction has a delightful colour spread of a fifties living room, complete with console television. "Catch up with your past" is the slogan and they invite you to watch their Bush TV22 TV to see 'Hancock's Half Hour'. This particular display wasn't on show the last time we went there (20 years ago!) but it's certainly a good museum.

York Castle Museum, The Eye of York, York, YO1 1RY. (0904-653611). Open daily.

LARGE ARRAYS

There are still many VHF television aerials to be seen on people's rooftops but occasionally a real monster takes your attention. That's what happened recently when your editor was driving through the centre of Melton Mowbray (Leics.), above which towered a three-element Band One yagi (plus other assorted metal) fixed to, of all things, a telegraph pole. Whose it was is not clear - possibly it belonged to the Post Office or a local TV dealer.

TV ON THE SILVER SCREEN

An interesting film was shown on Channel Four in April, writes *Barrie Portas*. Entitled "Meet Mr Lucifer", it was made in 1953 and starred Stanley Holloway, Peggy Cummins, Gordon Jackson and Ian Carmichael. Advertised as a satirical comedy, it is about a pantomime actor (played by Stanley Holloway) who dreams he is the devil and sets out to prevent people wasting their time watching television. There are some good shots of 1950s TVs in action, even the "Normal Service will be Resumed as Soon as Possible" caption. A good part is played by Gordon Jackson as a young chemist who locks himself in his room at night to watch a female singer on his TV set. It looks as though people forty years ago were seriously worried that television would become a time waster.

Yes, and of course the film industry was even more worried, which is why they made films that 'knocked' television! [AE]

NEW BOOK

The Vinten Group has issued a company history which you will not find in the bookshops because it has been published privately. It is a well written and illustrated history of this firm which is a legend in the motion picture and television industries.

Dicky Howett recommended it to me and I in turn recommend it to you if you have an interests in tripods, camera cranes and other studio hardware. **IMAGES OF SUCCESS** is a 180-page hardback and costs £11.99 post paid (cheques payable to Vinten Group plc). The company is at Cowdray House, 2-4 High Street, Chalfont St Peter, Gerrards Cross, Bucks. SL9 9QA. The print run is not large so you would be advised to order your copy now.

SCOTTISH EXHIBITION

Some of the following information is too late for you to act upon (the April exhibition is over) but it shows you the kind of event laid on by this enterprising group. The broadcasting exhibition (read on!) will continue until September.

The Museum of Communication was delighted to participate in this year's Edinburgh International Science Festival. While items from the collection have in the past been provided for major exhibitions such as 'Glasgow's Glasgow' and 'Jam, Socks and Television', this was be the first time the Museum has in its own right taken part in such a major international event. One exhibition room was laid out as a working television studio using 1950s and 60s technology, while the other illustrated the development of radio and television broadcasting. Features included working models, a 30-line TV demonstration, (including a 1924 BBC 'meatsafe' microphone, 1928 'Fultograph', transmitting equipment and 1936 tuning capacitors) and even 'backroom boy' work such as make-up techniques from the days of early television! The story was brought right up to date by the University's Electrical Engineering Department demonstrating the application of state-of-the-art scientific thinking to the practicalities of camera technology.

After the exhibition closed on 18 April, the television studio was put back into store (sob!) and the remaining items transferred to Bo'ness where many of them will form part of this year's Union Street exhibition. This is in the Bo'ness Heritage Trust Building in Union Street, Bo'ness and runs provisionally until Sunday 26th September. Opening hours will be 14.00 to 17.00 on Saturdays and Sundays.

The exhibition features broadcasting in Scotland, including 70 years of BBC radio, 50 years of BBC television and 40 years of independent television as well as putting the computer collection under the spotlight for the first time. Further information from Harry Matthews on 0506-824507.

MODEL O.B. VANS

Philip Howard of Dalkeith Auctions dropped us a line to say he had two mint Dinky Supertoy outside broadcast vans (no. 967 BBC mobile control room and no. 968 BBC Roving Eye vehicle). It is problematic whether this issue will reach you in time for the auction but if these interest you, it is worth getting on his mailing list. The full-page Dalkeith Auctions advertisement appears towards the back of each issue of this magazine.

NVCF REPORT

Jonathan Hill's collectors' fair for vintage sound and vision material on May 16th was a great success and indeed a most pleasant occasion. Jonathan says visitor numbers were up 35 per cent. For my part I can say all the arrangements went very well and the atmosphere was universally genial. Jonathan deserves a hearty round of thanks for putting on such a good event, and we look forward to attending again next year. The

date, by the way is Sunday 15th May so when you get given a nice new 1994 diary next Christmas, remember to transfer this date.

Several subscribers, friends old and new, turned up at the 405 Alive stand, where we were also able to demonstrate the Pineapple and Grant standards converters. Two subscribers told of recent success in finding pre-war TV sets. One discovered a 7" Marconiphone in an up-market antique shop: the set was marked £90 (!) but the price readily dropped to £40(!!!). The other case was a set found in an attic clearance operation, complete with two spare Emiscope tubes. If you add this to the seven pre-war sets sold through the trade this year it really does show that old sets are still there for the finding.

One of the things many visitors said is what a friendly, helpful bunch we are and how requests for information are generally answered in good measure. They also say our enthusiasm comes over in our publications. It's the same thing when it comes to old books or studio equipment, subject which fascinate some of our group - members are constantly helping each other out with hard-to-find parts, often at minimal or no cost. Long may this continue!

One last remark about the show: one stand had framed original posters relating to the first public demonstration of Baird television. They looked entirely genuine and were priced around £1,200 each. It's impossible to place a value on what are undoubtedly rare items, so perhaps you cannot argue over the price!

See also photo.

405 LINES IN FRANCE

Not a news item really but an interesting snippet nonetheless.

The French manufacturer Radio- Industrie has perfected a system of colour television, based on the French black and white standard, though producing a completed picture of 405 lines. It uses the field sequential system similar to that employed in the United States by the Columbia Broadcasting System, with 150 fields per second.

This system is compatible with present French receivers, i.e. colour broadcasts can be received in black and white, after a small modification of the receiver. The use of this colour system for public broadcasts has not yet been decided upon.

A further perfection of a colour system which uses no mechanical elements and is fully compatible in the frequency as well as quality of the picture, is still under study. [Television, A World Survey. UNESCO handbook, 1953].

VISIONETTE

Peter Yanczer in the USA is offering a kit to build a 24-line mechanical TV system (camera and receiver) for closed circuit use. It is described as an easy-to-build kit (presumably he drills the holes in the Nipkow disk!) with all electronics and cabinets included. For information send international reply coupon and address to Peter Yanczer, Tesla Electronics Co., 835 Bricken Place, St Louis, MO 63122, USA or ring +1 314 822 1748.

PHILIPS SG860A TV/RADIO

Jac Janssen in Holland is researching the Philips SG860A, which was a combined radio and projection TV of circa 1947/48. If anyone can help, please write to him at Hoge Ham 117d, 5104JD Dongen, Netherlands.

WHAT'S IN A NAME?

Finally, here's a funny observation, or at least it amused me. Boarding points on the new Metrolink tram system in Manchester are equipped with vandalproof loudspeaking telephones for passengers to request information or report problems. The instruction sign is different, though: it says 'Press to Speak - You are Being Filmed'. A sign of the times no doubt but isn't it funny when we say filming when we really mean televising. 'You are Being Filmed' sounds snappier than 'You are Now on Closed Circuit TV' though. I couldn't see the camera, by the way, but no doubt it was one of these micro-miniature ones (I don't think). Perish the thought that they were trying to fool us.

DATA PROTECTION ACT 1984

Subscribers' names and addresses (also telephone numbers, where known) are stored in a retrieval system for this magazine's correspondence and mailing purposes only. They are not disclosed to any other person or organisation, so any junk mail you receive is not thanks to us! If you object to having your details stored on computer, your entry will be removed and any balance of your subscription refunded.

DID THIS COPY OF 405 ALIVE DROP THROUGH YOUR LETTER BOX IMMEDIATELY IT WAS PUBLISHED?

If not, you would be well advised to take out a subscription - see details inside rear cover.

405 ALIVE (405は、かつての英国のテレビの走査線数405本を意味しております)

英国のテレビ関連（テレビ放送に従事した方々向けと云った感じの高度な内容）の機関誌405 ALIVEと会報の交換の話がまとめ、先頃1993年1月号と4月号（年4回発行）が送られてまいりました。ご興味のある方は事務局までお申しつけ下さい。



Archive of dreams . . . John Trenouth, head of television development at the National Museum of Film, Photography and TV in Bradford, sorts through some of more than 12,500 advertisement clips stored in its basement

PHOTOGRAPH: DON MCPHEE

THE GUARDIAN
Thursday June 17 1993

Too-good-to-hurry commercial break gets museum slot

Martin Wainwright

SOME of the catchiest tunes ever written, albeit on the unlikely subjects of yellowing teeth, instant gravy, and dirty carpets, became available yesterday for the first time in 30 years.

Britain's first public library of television commercials, ranging from a seven-second home-made clip to a 15-minute "ad magazine", opened for free viewing at a set of mini-cinemas in Bradford.

More than 12,500 advertisements have been rescued by the city's National Museum of Film, Photography and TV in time for its 10th anniversary, along with 500 television programmes going back to the early 1950s.

To stern and repeated reminders that "Hoover beats as it sweeps as it cleans", the first visitors queued up yesterday to watch a range of composite tapes.

"Commercials are mostly too short to show individually — it's a lot of effort to make a tape of just 30 seconds on Typhoo Tea from 1963," said John Trenouth, the museum's head of television development.

Slipping on earphones in one of the five-seater booths, you chose instead between categories: every Murray-mint advert (from "Too good to hurrymints" to "the flavour lingers longer... and longer... and longer"), a set of commercials all made in 1957, or half-an-hour entirely on toothpaste.

"I'm not sure who would want to watch toothpaste commercials for half-an-hour," said Lorna Mills, one of the organisers of TV Heaven. "But we've had plenty of advance requests for tapes from broadcasters, researchers, and people who just remember the ads.

"Tunes seem to be all important. Someone rang yesterday saying: I'm after an old vacuum-cleaner advert and I can't remember the name, but I'll sing you the tune over the phone."

The first British commercial broadcast, an ice mountain fantasy which plugged Gibbs SR toothpaste at 8.12pm on ITV's opening night in 1955, is one of the stars of the collection.

Peter Fitzbugh, the project's co-ordinator, is still looking for the 1963 Jelly Mallows classic, featuring a cartoon of the Beatles, and would be thrilled to hear from anyone with a copy.



A scene at the National Vintage Communications Fair (Sunday May 16th). Your editor is conducting some very important transaction whilst helper Dave Higginson anxiously inspects his watch (or is it his wallet?). The photo gives a good impression of how busy the hall was. The small diecast box on top of the Pye multistandard monitor is the Pineapple standards converter and gave a faultless display throughout the day. The Tandy TV/monitor above it displayed a 625 line signal, the Pye job showing the converted picture. [Photo by Dave Probert]

'IT PAYS TO KEEP YOUR EYES OPEN' DEPARTMENT.

Dicky Howett keeps his ears open.

Serious collectors of tv ephemera (as opposed to frivolous collectors of tv ephemera who, as we all know are only in it for the money/fame/girls/free lunches) take any opportunity to follow up likely leads, or respond to the faintest of rumours. This is the only way to do it, chums. If you really want to find that long-lost component, or elusive pre-war mirror-lid telly, then all you need for success is a good 'nose', faithful doggedness and a fair smattering of total luck!

405 Aliver Mike King had all three of the above-mentioned attributes when he attended recently, the 1993 Ipswich Radio Rally. Mike, ever on the lookout for likely electronic gear, spotted amongst the clutter, a rather nice Sync Pulse Generator. Unfortunately, Mike saw the SPG a fraction too late, the item having been purchased by a scrap metal dealer who was going to 'melt it darn..' for the gold bits. Horrified, Mike offered on the spot to buy the item off the scrap dealer. The dealer looked doubtful and played hard to get. The outcome of which, the dealer agreed to part with the SPG for the highly extortionate sum of £10. (It transpired that the dealer had paid, originally, one pound for the SPG).

Mike confessed that he was a bit cheesed off at having to pay so much for the SPG. "I was only going to offer a fiver", says Mike. "But the SPG looked interesting".

And so it proved to be. This particular SPG turned out to be slightly more than your common-or-garden generator. It was a Rank/Murphy professional monochrome machine of the late 1960's. It transpired that this versatile machine could (all for ten pounds remember) drive line systems as follows; 405, 525, 625 and French 819! Mike informs me that the SPG doesn't make tea, feed the baby or darn socks.



Between the Bookshelves

HISTORICAL TELEVISIONS AND VIDEO RECORDERS.

By Michael Bennett-Levy. Published 1993 by MBL Publications, £12.95. A4-format colour paperback, 60pp. ISBN 0 952 105777 05.

This is without doubt a remarkable book, remarkable for many reasons. It fills a crying need for the identification of early TV receivers, in a very satisfactory way and paves the way for further publications of its kind.

The book is the first full-length treatment of early TVs, a field which is growing rapidly in respectability, collectability and value. It is also self-published, which is an indication of the author's dedication to his subject matter. The colour photography, typography and overall 'look and feel' of the book set it above most similar picture books, and the book offers good value for money in what is still a minority subject area.

Anyone wishing to identify British-made TVs of the 30s and 40s will be well satisfied with this book, whilst 'landmark' sets of the 50s, 60s and 70s are also included. Remarkably, examples of most early domestic video recorders and video disk players are included, as well as a representative broadcast camera. To round off the contents, there are also valuable listings of pre-war TV receivers made abroad, in fact all known models. Nobody buying this book will be disappointed.

Gripes? Well, yes a few but not sufficient to detract seriously from the validity of the book. It is fundamentally a picture album with extended captions: a detailed technical history of TV receiver technology of this period has yet to be written. The author readily invites readers to augment or amend anything he has written and has promised a correction sheet to anyone who writes in. Sadly the text is marred by some spelling howlers and some of the captions read in style more like an auctioneer's catalogue than a collector's guide. But these are very minor niggles.

We look forward to future editions and in the meantime we can all enjoy reading this pioneering effort (and help the author recoup his investment in its publication).

[AE]

INTO THE BOX OF DELIGHTS - A HISTORY OF CHILDREN'S TELEVISION. By Anna Home. Published 1993 by BBC Books at £15.99. Illustrated, 176 pages, hardback. ISBN 0-563-36061-5.

Sad to report, not much delight in this history book. Anna Home, currently head of BBC tv Childrens Programmes, has presented little new information in this alleged 'History'. Instead she has padded (for that's what it seems) the entire volume with far too many paragraphs expressing her own point of view. Also, she pontificates repeatedly on the possible demise of 'quality' (i.e. BBCtv quality) children's programming. This, as a thesis for an O.U. course would have been fine and dandy, but not in a book labelled (or in this case mis-labelled) as a 'history' of children's television. Anna Home only skims the surface of this rich subject with throwaway statements, i.e. when talking of children's magazine programmes she states " ... 'Maggie', ITV's answer to Blue Peter..." Well... yes and no. 'Maggie' was another style of sticky-backed plastic show, less uptight and almost local inasmuch that it featured Teddington Lock quite a lot. I personally preferred 'Maggie', not least because the original female presenter, Susan Stranks

habitually wore tight white T-shirts and no bra.

Another familiar female presenter, Jennifer Gay gets the usual mention but Anna Home stops short of providing further information as to what happened to the child after she left " ... to continue her ballet training". Old stuff, this. An experienced and sympathetic television historian or journalist would have elicited something new. Did Jennifer actually become a ballet dancer? If so, where did she dance? Is she still alive for that matter? Who cares? But in a book about the history of children's television, we care for God's sake! Of the famous Bill and Ben puppet theft in the 1970s, Anna Home recalls nothing new, apart from repeating the fact that the puppets turned up in a London auction house. Frustratingly, how and why is not investigated. Indeed, throughout her book, Anna Home displays a rather apathetic attitude to her subject, exacerbated by a flat and uninteresting prose style.

This book (176 pages and rather expensive at £15.99) has a dubious claim to be a 'history'. It offers little in the way of (other than Anna Home's) personal reminiscences, which is surely, the life-blood of any creditable treatise? A clue to this singular lack can be found in Anna Home's 'Author's Acknowledgements'. It lists no source-names at all. A strange reticence.

Anna Home's book is a wasted opportunity and is little more than a blatant and undisguised BBC marketing exercise. In support of that statement I can reveal that on page 6 of the book it reads, "The following BBC Videos have been released *in conjunction with* (my emphasis) 'Into The Box Of Delights'"

You've read the book! Now buy the videos! Ho hum... [Dicky Howett]

Thanks, Dicky for expressing far more eloquently what I wanted to say. The only additional point I'd make is the awful title, which displays remarkable insensitivity. Coming relatively soon after the book 'Box of Delights', most people would perceive this book as an in-depth follow-up, which it is not. Either the book is passing itself off or basking in the reflected glory of that book (which is something no respectable author or publisher does) or else, as I more suspect, the title was chosen in total ignorance of the first book (which only serves to emphasise that this book was conceived as an exercise in self-glorification and not enlightenment). Either way, it reflects poorly on BBC Enterprises. [AE]

AVENGERLAND by Anthony and Annette McKay Published at £4.95 post-paid
by Time Screen, 88 Edlington Lane, Warmsworth, Doncaster, Yorks., DN4 9LS.
A4 paperback, 54 pages, well illustrated.

Ignore the title, just wallow and enjoy. Make quiet whoops of delight if you wish. Wonder how one low-cost book can create so much enjoyment, perhaps even purr with self-satisfaction at being right or else find the answer to questions that have tantalised you for years.

For this book will enable you to identify all those quaint old pubs, weird places and deserted airfields you have seen on TV over the years - but never knew where they were. Compiled during years of detective work, the book contains photos, maps and descriptions of locations used for filming nearly 400 different episodes of TV series (and feature films) from 1958 to the present day. Now you will be able to drink at the same pubs as *Inspector Morse*, drive down the same roads as John Steed and Mrs Peel, even escape with *The Prisoner*. Avengerland refers to the area within half an hour's drive of the Borehamwood and Pinewood film studios where series such as *The Avengers*, *The Saint*, *The Prisoner* and many other classic TV programmes did their location filming. Recently the same locations have been turning up in series such as *Inspector Morse* and *Lovejoy*. There are detailed maps of Avengerland and listings of

many other favourite film locations across the whole of the British Isles. The book cannot hope to be comprehensive - but it certainly is authoritative. [AE]

THIS IS BBC TV: THE FIRST THIRTY YEARS OF TELEVISION GRAPHICS (1934-1964). Third edition.

By Keith Hamer and Garry Smith. Published by HS Publications, 7 Epping Close, Derby, DE3 4HR. £4.95. A5-format paperback, 38 pages.

This is a revised and expanded edition of this well-known handbook, which has stood the test of time well. It is an admirable compilation of all the well-known tuning signals, clocks, test cards and globes used on BBC television. There are plenty of illustrations and the authors have gone to a lot of trouble to make it as comprehensive as possible. Highly recommended.

Of course, interesting new material continues to turn up. Grant Dixon recently gave me a newspaper cutting of 1949 showing a long-forgotten caption proclaiming "Experimental Test For Use By The Radio Industry". Another find was the book "Television Today" (Roy C. Norris, 1947) and this confirms Hamer and Smith's statement that, contrary to BBC legends, Test Card A was radiated regularly.

[AE]

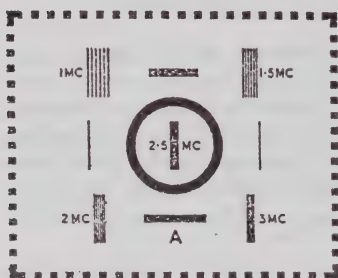


Fig. 188: Test card "A" radiated in the morning transmissions to the trade and permitting adjustment of important receiver characteristics.

FLICKERS

THE COLLECTOR'S GUIDE TO VINTAGE FILM

Published by the Vintage Film Circle (founded 1956). An invaluable forum for all serious collectors of vintage film, projectors, ephemera and related items. FLICKERS is published three times a year in March, July and November. Classified ads are free to members.

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Picture Page

Our movie review is 58 years late but so what? Here are two opinions on an old film which has resurfaced ...

For film buffs, one of the delights of the USA is its interesting copyright system, in which many films and TV programmes has slipped into what is called the public domain. Because their copyright has expired (or was never lodged properly), these films can be shown, copied or transferred to video by anyone who has the inclination.

One such film is 'Murder by Television', a fascinating but little-known science fiction exploit of 1935. Here is how video vendor LSI Video describes it: "This is a silly film, badly directed and full of continuity errors. Bela Lugosi stands out in a cast of mostly unknowns. Who killed the inventor of television? It was someone armed with 'the interstellar frequency that is the death ray'. Unbelievable."

Bela Lugosi was of course the star of countless Dracula, monster and ghost films, which will endear him to some of our readers who enjoy this kind of gothic horror. But of course the television apparatus will also make people want to see this film. This is what Jeremy Jago says about it

The film opens with a montage of actual electronics magazine headlines (one picture looks like Lee de Forest). Joseph O'Donnell's story involves long distance TV via 'quasi-optical waves', an authentic term of the period for VHF and above. An inventor falls dead while giving the inaugural broadcast on the three-quarter metre wavelength... rivals want the secret of all-America coverage without relays!

TV screens are clearly films rear-projected or matted-in (though instead of a special effects man, the titles credit as 'television technician' a certain Morton M. Stern). Interestingly, television is depicted in its early naive guise: instant remote vision at will - an attempted peek at London is foiled by fog!

In the background, though unused, is an enclosed Nipkow projector with top lens, of the sort then used in US television studios. A singer performs in front of a flickering spot projector, surrounded by totally authentic photo tubes in shiny reflectors. The projector, however, is a tiny spinning sphere - no hulking mirror drums here (I imagine murder by centrifugally hurled mirrors would have been rejected as insufficiently awesome).

The convoluted script, heavy with stereotypes (Confucius - quoting Chinese servant, panic-stricken black cook and a singing Irish cop!), eventually discloses the murder weapon as the 'Interstellar Frequency' - cunningly tying-in yet another issue of the day, death rays!

'Murder by Television' is a B-movie of low budget, but producer-director Clifford Sanforth has chosen an unusual theme which gives the film great curiosity value.

Roger Voeller, who is not a 405 Aliver but was kind enough to procure the tape for me in the USA, adds the following insights.

I watched the film twice and believe there is more to it than the silly story and the racial stereotyping of the servants. It certainly is accurate in depicting the kind of cut-throat competition that existed among television developers in the 1930s, although I doubt that it ever went as far as murder! I'm sure it is also accurate in showing how when one company or research group conducted a broadcast test, all its competitors were sure to tune in also.

I'm pretty well convinced that the film was bankrolled, or at least promoted, by RCA. A few observations support my theory.

- 1) Towards the beginning, a 'walk-on' character asks the girl at the newsstand for a copy of *Time Magazine*. Movies of that era **never** mentioned real products by name, and I think there was a connection between RCA and Time-Life Publishing, although I forget exactly what.
- 2) A little later, the scientist is talking to the chief of police, who is convinced that his 'radio teletype' system is completely adequate for police communications. Again, I don't have definite information, but I'm pretty confident that the radio teletype referred to was a product of RCA.
- 3) Towards the end, someone is searching through drawers and unfolds a telegram that clearly shows the title RADIO CORPORATION OF AMERICA. I'd also be willing to bet that the number 'The Right Idea' performed by the young lady at the beginning of the broadcast was distributed by RCA Records but that would be difficult to research.

Andy
I think that locating the story at White Plains, New York is also significant. I believe it was the site of at least one experimental TV transmitter. Otherwise, I can't imagine why any film maker would choose such an obscure location to place his story in. I'm at a loss to decide if the 'camera' which appeared in the movie was real or not - you'd probably be better able to answer that question than I. Anyway, watch the film a few times for laughs and with your friends - you might even pick up on something I missed!

To which Jeremy adds the last word (for the moment!).

Could I add my fourpenn'orth by suggesting that even if RCA didn't 'bankroll' the movie, they might have helped by waiving their recording royalty. Since RCA were the owners of variable-area soundtrack rights, they normally charged a royalty from film producers for every foot of film released using their system. Of course, if the film happens to have a variable-density track instead, this theory falls flat.

If anyone wants to find out how to acquire a copy of this tape, please contact me.

[Andy Emmerson]

Sale Away

Dicky Howett reports on a bid for 405 lines

The auction house Phillips of Bayswater conducted a sale recently (May 1993) of 'vintage' radio and television sets. And just for good measure, they had also on offer, a couple of ex-broadcast monochrome television cameras.

The bidding, before a select audience of seventy or so punters, was brisk. Recording the proceedings for American television was a crew with an NTSC Betacam outfit.

It was a jolly day out but I noticed that few of the audience actually bid for anything. This activity was mainly the province of a couple of obvious 'dealers', some enthusiasts and a lady Japanese who was linked to her client by phone (to Japan?). Initially, the Jap/phone connection scooped up a Decca Projection television for £1,140, a Marconi 703 (1937) television for £2,200 and as a titbit, a Bush TV 22 for a mere £180. Other bidders scored with a Bush TV62 (12") at £300; a Sobell 107 television/radio at £600; an HMV 900 television/radio (1937) at £1,600 and a somewhat butchered Marconi 707 television/radio at £1,800.

Gasps were heard for a non-television item. This was for an ancient Marconi multiple tuner (1907) reserved at £2,000. This box of tricks went for £13,600! The bidder was American, so he got himself a full close-up from the NTSC Betacam crew. He had a nice day

Returning to the cheap end of the market, the two aforementioned ex-broadcast monochrome television cameras proved to be EMI 201 models, the green (and slightly mouldy) type. This camera model was a 405/625 line vidicon channel, used in the early 1960s by (amongst others) Channel TV, BBC Southampton, Telly Centre Presentation B and the news studios at Alexandra Palace. The two 201 sale specimens were rather scruffy, with bits missing. They had come from the defunct Radio City 'Beatle City' exhibition in Liverpool - they were used as props - having made their way through a BBC studio, redundant stores and the Trocadero in London! A colourful life to be sure. Although correctly lensed and each with a matching camera control unit, the two cameras were missing their camera cable and incomplete as units (although a complete camera could have been constructed from both - why this wasn't done I have no idea). The cameras could then have been sold as one complete unit and one spare part unit etc...)

The reserve price on each was a rather stiff £200/£300. The bidding began at £100 each. Even at that sum, there were no bidders or takers. So why, you might ask yourself did not camera-mad Dicky Howett bid for these two cameras? Well basically for the above mentioned reasons. At two hundred quid-plus each, it all seemed a mite extravagant just to get one (possible) complete camera head. Another reason was that I didn't really fancy lugging home on the Tube, 2 cwt of camera control gear. As they say it's *definitely* a heavyweight hobby!

P.S. Actually, a day later I rang the auction house and offered a generous £150 for both cameras. I can still hear the laughter... All's well that ends well and it is now hoped that these cameras will be acquired for the national collection in the Bradford museum.

A Box Of Tricks

by Bernard Wilkie

Many of us saw John Logic Baird, not as the inventor of television, but as a master-designer of ingenious contraptions. Here was no mad scientist assembling 'Comic Cuts' devices behind locked doors because, whilst his prototypes may have smacked of Heath Robinson, they worked precisely as he intended and worked well.

Until the introduction of the computer and the demise of the drawing board, all scientific investigation was approached in this fashion. Trial and error was an accepted creed.

Small wonder then, that in the production of early BBC technical equipment, the same time-honoured methods were adopted. Handbag mirrors, plastic cups and galvanised wire were pressed into service and if the assemblies worked, they went into general use.

The list of arcane inventions included caption-scanners, lighting devices, optical masks and picture modifiers - all produced from plywood, glue and ingenuity.

One such contraption, known as the Caption Splitter, was invented to enable a single camera to do the work of two.

It was first used to screen the personal photographs of H.M. The Queen and the Duke of Edinburgh shortly after they'd returned from their first world tour.

H.R.H Prince Philip was invited to appear in a special programme staged in Riverside 1 where he would comment on each picture as it was shown on the screen.

But there was a problem. R1 had only three cameras. Envelopes were produced, sketches were made and the problem was solved.

On the afternoon of transmission the Caption Splitter's two terrified designers were installed at the back of the studio where they cranked handles on either side of a large plywood box.

Inside the box silver-surfaced mirrors slid quietly along polished rods presenting first one picture and then the next, while an optical line, travelling back and forth across the screen, successively wiped each picture and revealed the next.

The perspiring operators had to remove each precious photograph after it had been shown - remembering to watch the red lights that indicated which caption was on the air - and praying fervently that they'd assembled them in the right order.

There is insufficient space here to explain how the machine worked - suffice to say (in all modesty) that J. Logie Baird would have approved unhesitatingly and that W. Heath Robinson would have turned green with envy.

Old Cameras Never Die...

Dicky Howett admits to a spot of confusion

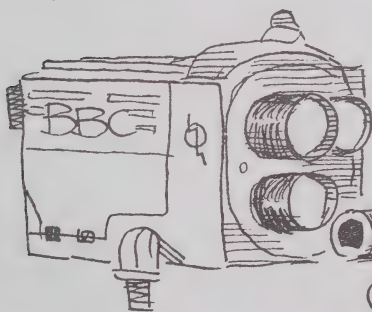
Over the past few issues of *405 Alive* I've asserted that certain cameras and certain studios were 'thus'. Others have said "nay, it was thus"! I make no excuses for *my* inaccuracies but I now hope to elucidate and throw light on a spot of confusion.

This concerns the television camera type known as the CPS Emitron, or confusingly *two* cameras known as the CPS Emitron. The CPS (cathode-potential stabilised) was an orthicon-type (3 $\frac{1}{2}$ ") low velocity image tube developed initially by Blumlein and McGee pre-war at EMI. Subsequently (in its original broadcast version - see picture 1) the camera was installed in the Empire Pool Wembley to cover the swimming at the 1948 London Olympic Games. This camera proved very sensitive (too sensitive - the camera 'peeled' on highlights.) The camera had the bonus of an electronic viewfinder and three lenses on an interchangeable turret. This camera type was later in 1950 installed at Lime Grove studio D.

In 1956, a new version of the CPS Emitron (the 10764) was commissioned at Lime Grove. This camera (see picture 2) had a four-lens turret. Both cameras used the orthicon-type CPS. The CPS tube was improved throughout its life. The picture quality was exceptionally good, resolving at least 750 lines.

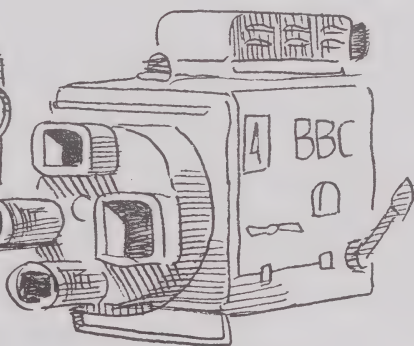
In its final 10764 form it covered such programmes as 'Grandstand', 'Panorama' and 'Dr Who'. It was used also as a standards converter.

PICTURE 1



'CPS EMITRON'
CIRCA 1947

PICTURE 2.



'CPS EMITRON'
'10764' CIRCA 1956

But what's it worth?

by Andy Emmerson

I suppose it's not surprising that I get quite a few people asking me to put a value on their old TV sets. Sometimes they are members of the public, with no interest in collecting or understanding of the market. If I give them an honest answer, I suspect most of them think I am either mad or lying, since they are invariably convinced *their* set is worth a small fortune and that there are dozens of collectors who'd give their right arms for this particular model. I wish these people good luck and a strong constitution since they will have a long wait realising the fabulous sum they expect to receive from their heirloom!

Just as frustrating is the person who doesn't state which make/model/screen size their set is, nor the year of manufacture. The maker's name should be somewhere on the back, front or top, whilst if there is an original receipt, instruction book or TV licence with it, this may give a clue to when the set was first bought. Try looking for the date of printing in tiny figures at the very end of the instruction book (it may be in some code, e.g. 10M0653, indicating 10,000 copies printed in June 1953).

Some points are very important, for example screen size (measured diagonally - the nominal size is always larger than what you can measure because some of the tube front is covered by the mask which surrounds the tube) and the state of the cabinet. Collectors prefer table sets to console models and small screen models to those with large picture tubes. The state of the cabinet is also important, since clean, unblemished ones are obviously more attractive than faded or scratched ones. In most cases it's still a buyer's market - the only shortages are of bakelite-cased sets and pre-war models.

In general terms, let's assume the set was bought in the mid-1950s and that it's from a well-known make and has a 12" or 14" picture tube. In absolutely perfect condition it could fetch about £50, otherwise between £20 and £40. On the other hand, if it's a Pye or Invicta 9" console of 1946 to 1950 (slim and lightweight), the price would rise to £75 or £100 for a really good specimen. Pre-war sets in good condition fetch at least £1000 and up to double this figure if really special.

These prices are what a keen collector will pay; dealers tend to offer 50 percent lower since they are taking a gamble on reselling the set and have their costs to recover. Not all collectors are prepared to travel to view a set, which can be a problem for the advertiser. Collectors also get rather annoyed if they travel a long way to buy a set described in good condition and find it is nothing like that, so it is worth looking objectively at the TV - if it was a piece of furniture, would you give it house room in the state it is? Are there scratches, woodworm holes or pieces of missing or lifting veneer?

It is almost impossible for a non-expert to give an opinion on the electrical state of a set. Do not attempt to switch on a TV which has stood unpowered for many years; this will almost certainly end in smoke if not a bang. The voltage must be brought up slowly, using a variac or lamp bulbs in series as a voltage dropper, so as to reform the electrolytic capacitors gently.

Keeping the Gloss

by Andy Emmerson

Everyone agrees, there are few finer sights than a gleaming article of bakelite. It doesn't really matter whether it's a radio, telephone or a TV receiver... there's just something immensely appealing in the fine details and hard lustre of that plastic.

What a shame then that this lustre vanishes all too fast. So many artefacts made of bakelite seem to lose their gloss and end up brown and porous. It doesn't seem to have anything to do with the age of the item, so why does this happen and what can be done about it?

First, let's look into the technology. Bakelite is a thermoset plastic, that is a plastic which starts molten as a liquid but once solidified, does not revert to its liquid state when heated. In crude terms it consists of a resin (which has the glossy appearance) plus a bulk filler material, usually wood flour. The shiny surface you see and admire is the top layer of resin but this is often very thin. Once rubbed away through atmospheric action, over-enthusiastic polishing or by scorching in the sun's rays *it is lost* and nothing will bring it back. You are then left with a mixture of resin and wood flour and wood flour, being very fine sawdust, is not a particularly glossy material. It is this wood flour that looks brown and porous once exposed.

Clearly some bakelite plastics were better than others and quite possibly the older variants contained more resin and less wood flour. No doubt it was cost cutting that reduced the resin content.

The restoration techniques you use will depend on whether the top layer of resin is intact. If so, then gentle polishing with Paste, Polishing No. 5 is the best remedy. This will remove any film of "gunge" and leave a smooth, glossy surface. But if the surface is already rough and porous this will not help.

The technique then is to cut away the discoloured layer with a hard brush and grinding paste ("soap") if you have a buffing machine. Otherwise use an abrasive polish such as T-Cut or Color-Bak (car paint restorers) or Bluebell (metal polish). Then let this dry, wipe off the residue and inspect the bare material exposed. If it has retained its pigment, polishing with a liquid real wax polish will suffice. Buff it up to a high gloss and be prepared to repeat this exercise every twelve months or so.

If the bare material is discoloured, you will need to add new pigment. For black there is an intense black stain in car accessory shops called Back to Black - use it but try not to get it on your clothes. Otherwise you can use shoe polish (work it well into the pores of the bakelite) and buff it off several hours later. Several applications may be required. Then finish off with liquid wax polish.

These techniques work. I know they do and they work very well. There may be other products and methods, so let us know if you can help.

An account of early BBC Television Studio Operations and Engineering

by Larry Coalston

The following is from my personal recollection of BBC Television during my working years on 405 line transmissions. I would like to thank Tony Bridgewater O.B.E. (former Chief Engineer BBC Television) who has kindly verified the main facts of the story.

In BBC Television Operations and Maintenance department there were two types of jobs. Technical Operators or Maintenance Engineers. Engineers spent a few months training in each section of Operations & Maintenance department but opted to work mainly in Studio Apparatus and Control areas. After a qualifying period they were promoted to Studio Engineers or Telerecording and Videotape Engineers, eventually becoming specialists in their particular subject. A Technical Operator, however, had the choice of working with studio productions in either sound or camera operations or vision and lighting. This was not so in the early days of Alexandra Palace when nearly everyone was an engineer except the producers and their assistants and scenic operators.

The amplitude of the vision signal produced by the Emitron and Super-Emitron cameras was not directly proportional to variations in the incident light which formed the image on the photo mosaic plate as was originally thought. When the mosaic was scanned by the high velocity electron beam, large numbers of secondary electrons were displaced which bounced on to a collector electrode. To establish a balance the mosaic took more electrons from the cathode beam and this produced a spurious shading signal called 'fuzz' at the end of each line and at the bottom of each frame (field*) This fuzz was corrected by adding a combined sawtooth and parabolic waveform called 'Tilt and Bend'. Engineers who worked at Alexandra Palace told me that sometimes when the fuzz was quite bad and could not be adequately corrected, viewers telephoned to say that "the footlights are showing very bright this evening and are in the bottom of the picture !!"

**In the early 405 line television specification, each complete 202 $\frac{1}{2}$ line vertical scan was called a 'Frame' = 1/50th second with two Frames = One Picture = 1/25th second. It was not until 1950 that the terminology was altered to 'Field' and the picture aspect ratio changed from 5 x 4 to the 4 x 3 cinema screen shape to conform with standards in USA. and other countries*

The EMI Emitron camera control apparatus contained large numbers of valves, mounted on various chassis and assembled into racks 19"/21" wide and about 7ft. high, with the tilt and bend waveform correction controls on the front panels. The vision engineers sat on fairly high stools and had to walk along the racks to make adjustments. Some of the adjustments at the top of the bays could only be made by standing and reaching up at arms length. As there were always quite a number of continuing picture corrections, two people per rack (camera) were always required. The rack engineers acquired a high degree of skill for judging picture quality as well

as an ability to quickly compromise the settings as the picture changed. The engineers were referred to as 'Rack Operators' or simply 'Racks' and this name remained in use right through to the late 1950/60s. Another name which came with A.P. was the use of the term 'Gallery' for the production control areas. This was because the approach to the vision mixing desk and the monitors was by a steep wooden open stairway to a level about 10 ft above the apparatus racks.

Although I was not in the BBC during the early days of A.P, I did get a chance to try out the old Emitron racks and tilt and bend controls during breaks in rehearsals for a programme in 1954 to say "Goodbye to Alexandra Palace". The programme was made using cameras from an O.B unit (MCR9) parked on the terrace by the side of the tower. A contribution to the programme was an excerpt from a well known play about World War One, called "Journey's End", transmitted live, of course, from studio A using the Emitron cameras. Then over to the O.B cameras in the restaurant, where Leslie Mitchell interviewed a number of celebrities who had appeared on television from A.P in the pre-war days. Although the old Emitrons were at the end of their useful life, and due to be scrapped, the A.P studios were taken over by BBC Television News and reopened a few weeks later. A BBC news film service had been operating producing a bi-weekly high quality film newsreel for some years but there was now a change of policy and a live daily newscast with captions and slide inserts was planned to take its place. A small team of newsreaders was recruited and the studios were re-equipped with Pye *P.E.S. photicons.

** In 1936/7, engineers from EMI were often at A.P. observing and trying to improve picture quality from the Emitrons. During breaks in rehearsals one of the EMI engineers, Bernard Greenhead saw that when the covers of the cameras were removed for a quick inspection and maintenance check under the studio lighting, the spurious 'fuzz' signal almost disappeared. This led to experiments with a small lamp lit from the valve heater supply and wrapped in a sheet of 'Bronco' toilet paper to diffuse the lamp filament. This was then placed inside the camera near to the mosaic and when the brightness of the lamp was varied with a series variable resistor, the 'fuzz' could be controlled and reduced to an almost negligible amount. The idea was copied much later by Pye in the 1950s and incorporated in the 'Photo Electric Stabilised Photicon' i.e. PESTicon cameras. (Some engineers called them a PESTicon - a slightly different emphasis - guess why !!)*

On the occasion of the "Goodbye A.P." programme the camera control units of the O.B. Image Orthicons were operated as usual by engineers. Two senior engineer/rack operators were responsible for the line up and transmission picture quality of three or sometimes four camera channels whilst supervising an assistant. This was a normal procedure for O.B. working and allowed trainee engineers (like myself) the chance to gain valuable operating experience.

Due to variations in the sensitivity of early Image Orthicon tubes the 'f' stop of the lenses for optimum picture exposure was often different from camera to camera. Two senior BBC engineers Don. Brothers and Ben. Palmer, headed a small team who researched and devised a camera line up procedure and test slide so that the standard sensitivity of all cameras would be within a 1/2 'f' stop. and require only 5 per cent adjustment of lift and gain. A special slide which contained a relevant part of test card C was made for the camera diascopes. The Brothers/Palmer method of lining up

the camera channels was followed by all London television studios in the late 1950s and used for all I.O. 4 1/2" camera channels.

The television technical operations department was also re-organised in the mid 1950s with a number of new jobs called Vision Operator, Vision Supervisor and Lighting Supervisor. The production department realised that studio lighting was a very important contribution to the success of a programme and the Head of Programmes encouraged the idea of a separate control area for lighting, with a control console operated by the lighting supervisor. The intensity of the lamps could be adjusted whilst observing the picture on the studio monitors. The camera CCUs and operators were separated from the lighting control at this stage in a cubicle alongside. BBC Riverside studios control areas were designed in this way and it was found by experience that, although satisfactory, some 3 to 4 engineer/operators were required. In the early 1950s the matching of pictures from different cameras was achieved by adjustment of controls such as Lift and Gain, and lens Iris. However only the very latest types of camera had remote control of the Iris. With a fixed 'f' stop the adjustment of lift and gain was insufficient to deal with many of the wide variations in the lighting contrast and as a next step all camera channels were modified and rewired to allow the operation of the lens iris and the CCU. Lift and Gain (5 per cent) by remote control. These controls were grouped on a panel in front of high grade monitors (usually 14" Pye 2780) in the Lighting control gallery. This was also tried out at BBC Riverside, studios Hammersmith, and proved so successful that the ideas were incorporated into the new studio installations at Television Centre. After the Television Centre opening programme from Studio 3 in 1960 the vision operational set up became known as "One Man Vision Control". Although only one operator was needed to operate the remote controls of Iris/Lift/Gain for all four or five cameras (4 cameras were normal with 5 for the larger studios), two engineers were constantly checking settings of pre-set pots (Electrical focus and dynode volts etc.) on the CCUs in the separate apparatus room.

The success of this standard camera line up and the 'one man vision control' operation soon spread to all BBC studio centres and was tried with all 4 1/2" I.O. cameras. As a result the quality of pictures from Image Orthicons was much more satisfactory and consistent. Control of the settings of studio lighting was another major factor which helped towards the improved quality of pictures. The high standard of black and white picture quality with a contrast and grey scale close to that of photographic prints and cinema film was maintained and continued well into the late 1960s. 'One man vision control' became firmly established for operation of cameras for the BBC 2 625 line service, but with the coming of Colour television, a standard camera line up could not be devised for the 3 and 4 tube plumbicon camera channels for some time. The correct spectral response of the prism used for splitting the colour image into the primary R.G.B. and luminance signals had to be carefully looked at first, and an investigation into this was referred to BBC research department. In the case of the later E.M.I. 2001 Colour Camera it meant that many of the camera colour prism wedges were returned to the factory for modifications.

Copyright Larry Coalston, July 1993.

"BBC Test Transmission"

by A.G. Keeling

This article concerns those rather lovely scenic picture-postcard views that the BBC radiated with their Test Card C from the mid-fifties until around April 1964, just before transmission started of the rather clinical-looking Test Card D.

At a rough guess, one of the earliest test pictures was a view of rooftops with hills in the background (location unknown). The other depicted (if my memory serves me correctly) Newquay Beach at low tide, complete with "sun worshippers" (who appeared like ants on the old 405 lines) and the steps that led down to the beach. These two pictures were used from around 1957 until 1963, and of course they were titled BBC TEST TRANSMISSION in white lettering (the ITA never captioned their picture slides).

Around 1961 a rather magnificent view of Loch Ness in Scotland appeared, and in the autumn of that year, two views of the Shepherds Bush Television Centre also appeared. The second of these two, which was radiated frequently until 1964, showed the ornamental gardens at the rear of the TV Centre, and there was even a "little old lady" walking over the tiny bridge.

In 1962 three more views appeared, two of which I think were Paignton harbour in Devon and the third one being Brixham harbour. By this time also, the famous BBC TV blocks were used in the titles, as also in one of the last picture "stills", which was a view of St Martin's-in-the-Fields church. These BBC slides were, maybe, a little less memorable as they were transmitted only during morning periods and unlike the ITA slides, were seldom seen during afternoon test transmission times.

Thanks Alan for a remarkable feat of memory. I have been unable to find proper examples of these pictures, though I have a photo taken in 1959 of the Post Office TV switching centre showing check monitors of the BBC Crystal Palace and ITA Croydon transmissions. Helpfully the clock says 4.55pm and the BBC is showing what looks like Westminster Abbey (captioned BBC TEST TRANSMISSION) whilst the ITA has the well-known River Thames slide. The photo would not reproduce well here, so it is not included. [AE]

Stop Of The Pops

by Bernard Wilkie

It's often forgotten that 405-line television was not simply the transmission of black and white pictures; it also involved sound. And what's so special about sound? - radio had provided it for years.

Of course, but radio was able to stand its performers in front of static microphones, use a corner of the studio for sound effects and go by the script; its engineers seldom had to contend with mobility.

Even in film studios the sound engineers needed to work only in prescribed areas for the length of a take - and could always go for take 2 - and the safety net of post-production dubbing.

But the problems that arose from actors walking about - the dead areas, the live sound, were quickly dealt with by the boffins at Nightingale Square, the then home of [BBC] Research Department. It was here that I played such a monumentally insignificant part.

Signed up by Dicky Drewe to work for seven quid a week (if I'd known how anxious he was to recruit staff for the move to Kingswood Warren I'd have stuck out for seven pounds ten!) I became a BBC designer/draughtsman.

My first job was, literally, a cracker.

A lovely scientist whose name I have unfortunately forgotten was testing the studios at Alexandra Palace for acoustics; and to get accurate decay measurements he needed a standard sound. No, not a tone source, a pop! Well perhaps not a pop, more of a sharp crack really.

And that's how he and I endeavoured to build the ultimate pop-gun. Based on a child's toy, popular at the time, it produced a bang by rupturing a diaphragm of paper with compressed air.

We built ours of brass and enlarged it to the size of a blunderbuss. When fired, the retractable spring-loaded piston compressed the air inside, forcing it through the paper which sealed the muzzle, producing a sound like the bursting of a paper bag (remember those?). Visitors to the drawing office would leave white-faced and shaking, while my fellow draughtsmen petitioned management to have me re-located in a shed outside.

Super-gun it was - constant it wasn't. I don't think it ever made the journey to AP.

Reluctantly we abandoned the project, returning the various parts to stores for re-use. My boffin went on to write abstruse papers about narrow-band sound filters while I was forced to work on such prosaic things as chassis layouts, microphone plots and wiring diagrams for derivative equalisers.

But Heath Robinsonism will out and fired by my first lack of success I went on to design even more bizarre devices. Perhaps in some later edition of *405 Alive* the editor will let me talk about them.

No perhaps about it - it's an order! [AE]

David Grant's 625 to 405 Standards Converter

A review by Jeffrey Borin

Suddenly the world is full of standards converters! David Grant's converter has existed for a little while but I have only recently obtained a sample for review. Inevitably this review will compare his design with the Pineapple unit reviewed in the last issue of *405 Alive*.

A FAMILY OF CONVERTERS

This is not one design but a whole family. This ranges from a kit without interpolation at £180 to a unit built in a very professional 19" rack case for over £800.

At the time of writing not all prices had been finalised but here is some idea:

Kit without interpolator: £180

Kit with interpolator: £250

The kits come with all tricky assembly such as surface mount components done. The analogue parts are pre-aligned so no test equipment is needed. Assembly is not difficult but remember that soldering chips to PCBs is a rather different task to wiring valveholders. You will need to provide your own box and power supply. Instructions are provided along with circuit diagrams etc.

Ready built unit including box and power supply: Add £80 to above.

Broadcast grade video filters, 19" rack case etc are by individual quotation.

There is no intention to add a modulator. Refer to my review of the Pineapple converter for information on modulators.

FIRST THOUGHTS

Operation could not be simpler. The only control is the mains switch! BNC sockets are provided for 625 video in and 405 video out.

The construction quality is excellent. There are two PCBs for the main converter and a futher one for the interpolator. These all plug into a small PCB mother board. Unfortunately this means that access to the lower boards is very limited so faultfinding and repair might be tricky. On the other hand it all runs cool and should be very reliable.

The review sample used a small switchmode power supply. This was not shrouded and would make working inside the box quite hazardous. With the outer cover in place the converter is perfectly safe. I am assured that all future converters will have their live parts adequately covered. Future units will probably also have a linear power supply since the total consumption is under 10 watts.

INTERPOLATION

David Grant's converter uses conventional line store technology and its concepts are based on the BBC CO6/509. This contrasts with the Pineapple and its frame store. The two line interpolator uses successive lines from the same field. It is fully digital unlike the Pineapple design. The interpolation is excellent and difficult to distinguish from the CO6/509 which uses four lines.

RADIO INTERFERENCE

The converter contains much high speed digital circuitry which is a potent source of RF interference. If you buy a kit you must house it in a metal box. The review sample did not cause any significant interference.

ENGINEERING NOTES

All the circuitry has been designed and built to a very high standard. It is difficult to find even the most minor fault with the performance of the converter. In the absence of video input the converter produces 405 line sync at the wrong frequency. This is comparable to the BBC CO6/509. With very poor quality inputs it is possible that the Pineapple converter with its frame store might produce usable pictures where David

Grant's might not. Certainly the Pineapple converter is incapable of producing bad 405 sync pulses however grim the picture looks.

PICTURE QUALITY

The subjective picture quality is very good. I compared the converter with a BBC CO6/509 using a professional video monitor and several receivers both pre- and post-war. It was difficult if not impossible to tell the difference. In particular there was no ragging of verticals. (NB this effect is still present on a production version of the Pineapple converter that I saw recently) The unit copes well with VHS replay.

CONCLUSIONS

For many people the Pineapple converter will be the right choice. It is cheaper, has some nice tricks like picture freeze and gives good pictures. If you want the very best results or if you enjoy building a kit then David Grant's converter offers outstanding performance and is recommended.

Coming next...

The article starting on the next page by Tony Currie appeared first in *Television*, the journal of the Royal Television Society (yes, that one, not the magazine previously called *Practical Television*), and is reprinted here with his permission and with acknowledgment to the RTS. There are two minor points worth mentioning: Victor Lewis-Smith was not the person who discovered the Law of Logos. In his usual derivative manner, he ripped off the idea from Peter York, who had expounded it earlier on BBC2's *The Late Show* (but nobody stays up that late to watch BBC2).

Technically, most of these symbols are emblems or idents rather than logos. The Oxford Dictionary defines a logo as a printed symbol (not a heraldic device) used by a corporation or business company etc. as its emblem; the word is short for logotype and comes from printers' jargon to cover the situation where a word (*logos* in Greek) was used so frequently it was worthwhile making up a block of type for the complete word (rather than setting it up letter by letter). Of course, not many printers use type set in metal these days but the expression has stuck.

Most of these TV emblems are abstract symbols or devices rather than words! In the TV business they are often called visual idents, short for identification symbol, since they were used to distinguish the station you were watching (or which had created the programme that followed).

Fine - end of lecture, over to the inimitable Tony Currie...

Honor Blackman and Patrick MacNee in *The Avengers* - a programme with confused credits



accompaniment of five notes on a Hammond organ, proclaiming the identity of the nation's first commercial TV channel.

ITV company number two 'borrowed' the famous eye symbol from US network CBS; doubled it and filled the centre circles with the first three letters of the alphabet, coupled with three bongs on a set of chime bars. Company number three wanted to use the same three — letter identification, so company number two graciously changed their name from the Associated Broadcasting Company to to Associated TeleVision. The rest stuck.

Now when there were only two companies — as in September 1955 — there was an obvious logic to putting some kind of identification fore and aft home-grown produce, to alert your new viewers to your role in its creation. But the new commercial network grew, Topsy-like. Granada sprouted what might have been a dipole aerial or perhaps a thin umbrella which pointed to "the North". It did so without the benefit of even a single musical instrument. (Aye, they're a canny lot up North.) The Mark II version of ABC Television sprang to



TONY CURRIE on the confusion surrounding TV company logos

Identity Crisis

Just when I thought the perils of that dreaded disease ident-itis had mercifully passed us by, I was alarmed to see signs of a further outbreak on our new age screens.

Tuning in to *The Bill* on Thursday evening, you spot the Thames Television Production symbol at the end with the curious appendage, "...for Yorkshire TV". Then suddenly up comes "A Yorkshire Presentation for ITV". Consternation. Has Sun Hill moved to the Yorkshire Dales?

Next programme is *Minder*. You would be forgiven for expecting the Thames end logo but are confronted with "A Central Programme for ITV". What's occurring, my son? Has Arthur Daley finally moved his business to Birmingham? Then there's a sudden burst of ex-

pensive and unfamiliar new local logo.

I try seeking sanctuary from these confusing images over on C4, where they are screening a 1961 episode of *The Avengers*. End logo credits an ABC production. Then a credit for Weintraub Entertainment, copyright 1990. Then a whole mass of stuff keyed over a bit of scratchy blank film ending with: A Screen First Production for Channel Four. Copyright Channel Four 1992.

Has the TV world gone mad? Even the BBC-1 globe ain't what it used to be.

When did the first symptoms of this dreadful disease first show up?

In the beginning there was the sunburst: The Associated-Rediffusion sunburst.

It revolved more or less gracefully to the low-budget



life in a white triangle, and no expense spared for both chime bars and a kettle drum.

Then they all got in on the act. Big letters with little letters inside them; circles, squares, stars, crosses, dotted rectangles, dissected lines or hexagons all littered with ships, anchors, lions, dragons, or statues. Ulster Television's logo, chosen from over 450 submitted to the company, was, in the words of its designer, Roy Irwin, 'based on an electronic pattern' while Ron Goodwin played 'The Mountains of Mourne' on a celeste. So now you know.

With the first round of franchise changes in 1968 things became even more bizarre. Harlech tried mass-hypnotism on its viewers; Thames and LWT started with dignified and simple typestyles but soon found moving pictures irresistible, and Yorkshire introduced yet another geometrical shape into the mix — a chevron.

By now, every programme had a logo fore and aft, and probably the local company ident somewhere in the middle. What, I wonder did Average Viewer make of it all?

Come the start of colour, ATV tried another act of mass hypnotism with its wobbly trumpets and its wobbly circles. Meanwhile many companies just leaned over for the 'colourise' pot on the vision mixer and turned their old black and white logos into nice new blue-and-white ones. From time to time new designs emerged. Gra-



CARLTON



nada shoved its dipole into the middle of the letter G. Westward swapped a cartoon ship for an Airfix model.

More new companies meant more grotesque images. It was Victor Lewis-Smith on BBC-2's *TV Hell* who first discovered the Law of Logos. This states that the size and complexity of the logo is in inverse proportion to the size of the company. Thus TSW in Plymouth created a monstrosity that looked suspiciously like a set of green wobbly bikini-tops, replete with the Registered Trade Mark symbol in the corner. (Would anyone want to steal it?)

TVS used new digital picture manipulation techniques to re-invent the chevron, and Central never seemed to be certain of what their logo was meant to be. Sure, it was a circle, but did it have a coloured shadow or was it more like a badly sliced Dutch cheese?

Meanwhile, revamping broke out all over the country. LWT went all patriotic with its red, white and blue stripes, HTV rediscovered the dipole, Thames put St Paul's into a triangle that seemed rather reminiscent of the ABC (Mark II) logo, Ulster made a silver version of their logo that looked more appropriate as a Golf Club trophy. And Scottish constructed a moving thistle out of a left-over box of liquorice allsorts.

Now here we are in 1993. A new generation



has emerged. Carlton is the first company to have developed immunity to this disease and came up with real people instead of expensive animation. But habits die hard in Plymouth where Westcountry have discovered the letter 'W' (once a star in its own right, of course, in an episode of *Sesame Street*) and Meridian have reactivated the Rediffusion logo as a sunburst with a little face in it. Aw.

All this is still hugely confusing for Average Viewer. A couple of years ago, the ITV companies got together and agreed that all these conflicting images destabilised the channel's identity, so at no little expense the corporate ITV logo was designed together with subtle regional differences in the little triangle. Didn't last long, did it? Channel Four always insisted that it would never show anything other than defunct cuisenaire sticks at the start of its programmes, but regrettably lacked the courage to obliterate yards of doodles from the other end.

New satellite and cable stations know what the game's about. They never let anybody else's logo appear, since they know that in a multichannel environment it's essential that Average Viewer knows exactly which channel he is watching and - most important of all - which channel she wants to tune in to again.

If ITV doesn't do something about its identity now it may become totally anonymous in the all too near future. □

■ Above and previous page — the original logos from all the ITV Companies

A Bucket Of Smoke

by Bernard Wilkie

Although I have always been, and will always be, a dedicated engineer, at that time in my career I felt a deep yearning to return to the boards. It was 1951 and I had been at Kingswood Warren for three years. In many ways I was enjoying an ideal existence - a drawing office in a beautiful mansion, set in magnificent grounds, and just a short bike ride from home. There I played cricket in the lunch hour and tennis in the evening.

Why then did I make so many attempts to give it all up in order to subject myself to the rat-race journey to London and the odiferous atmosphere of Shepherd's Bush?

My reasons stemmed from the fact that during the final months of my wartime service I became, by chance, a founder member of a theatre group in Germany. Based in a small theatre in Bad Eilsen this outfit organised local and travelling shows. My role (apart from a permanent invitation from my officer chums - and I was only a corporal - to drink their mess dry) was to run the backstage mob which made and painted the scenery and props. The smell of rotten size and greasepaint entered my blood and ever after I hankered to get into show-business.

My chance came when Richard Levin, the then new head of Scenic Design, gave me an interview at Television Centre. I had just applied for, and been rejected yet again, for a post in Television, but he was interested in my "research" capabilities.

"Do you know anything about fibreglass?", he asked. Like millions of others I knew damn-all about this technique, which in 1951 was still in its infancy. "Oh yes," I replied, hoping to bluff my way through his questions.

But he knew even less about the process than I did. "Good!" he said. "I've got a rep from Scott-Bader coming this afternoon and I'd like you to talk to him. Be back here at 2.15."

It was a short walk from TVC to Hammersmith library, but I caught a fast bus! At my urgent plea, the librarian dug out the scanty stuff they had on glass reinforced plastic and I mugged up the buzz-words.

That afternoon, the rep who needed at all costs to sell his firm's products, was putty in my hands.

"What release agents do you recommend?" I queried haughtily, "and what is the minimum gel time?" Thinking me to be the man in charge, this rep kissed my feet (metaphorically) and rabbited on for hours. Richard Levin was so impressed that he immediately arranged for me to be given a three month attachment to his unit in Television.

I was in!

In those days bulky items of scenery were constructed of plaster; they were heavy, fragile and usually very damp. It was my task to re-create prototypes of these in fibreglass. I started by moulding a nine foot column

complete with cap. Levin was over the moon. Here was a scenic item which could be carried by one man instead of four, and which when knocked over, neither shattered into a thousand pieces nor dented the studio floor.

My stock rose by metric inches.

For almost a week my boss carried this column wherever he went. It was taken into meetings, shown to other heads of sections and photographed for the local press. My reward was that he penned a personal memo to HRD requesting that I be released from engineering and given a permanent post in television design.

I was really in.

Epoxy resin has a nasty habit of going critical if too much catalyst is added. Ever in a hurry I took chances which didn't always come off. It was when I was dashing from the plaster workshop carrying a smoking bucket of red hot resin that I came to the attention of my (to be) lifelong mate and partner Jack Kine. We were to form the first ever television special effects unit. But that's another story.

Father of Australian Television Dies

James Hubert Thomas Fisher, the telecommunications researcher who pioneered the introduction and development of broadcasting in Australia, died in 1992 at the age of 81. Here is a brief summary of the life of this remarkable Australian.

Born in 1911, Jim Fisher developed a keen interest in the concept of television soon after he commenced engineering studies at the University of Adelaide in 1929. He joined the Postmaster-General's Department (PMG) as a cadet engineer in 1930, and after qualifying in engineering moved to Melbourne in 1936 to work in the PMG Research Laboratories.

Jim spent much of his time studying overseas technical publications which reported early television experiments and trials then under way in several countries. He began to prepare himself and his country for the inevitable advent of television still some 20 years in the future.

In 1937, to raise the awareness of television within the Australian engineering fraternity, he prepared a paper entitled "Recent Developments in Television" which he presented to the Institute of Engineers. He illustrated the principles involved by demonstrating a hand-built television system of his own design. Rudimentary though it was, his system was as technically advanced as any in the world at the time and produced one of the first television images on a cathode ray tube ever seen in Australia.

In 1938, Mr Fisher prepared the first of many secret reports on television for the Commonwealth Government. These reports forecast the characteristics, likely costs and establishment of a television service particularly in the Melbourne area.

The advent of World War Two interrupted his television research as he was redeployed to urgent and secret development work on radar. He co-ordinated work on the design and manufacture of Australia's anti-aircraft Shore Defence Systems in

1940 and from 1942 worked on radar-guided searchlight system.

After the war there was considerable pressure on Australia to adopt the British 405 line TV system. However Mr Fisher disagreed as he believed that this system was lagging in technical development and pressed forward for the 625 line system. This latter system was finally adopted in Australia and it is largely down to Mr Fisher's lone stand on this issue that we now have this high quality system.

He travelled to the USA and Europe in 1949 to acquaint himself with the latest trends and upon his return to Australia, he commenced a training scheme for future television industry personnel at the Royal Melbourne Institute of Technology from 1951 to 1956.

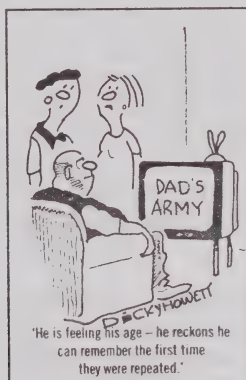
Mr Fisher left the PMG in 1954 to become Engineer-Television with the Australian Broadcasting Control Board, where he wrote the first technical standards for television broadcasting. One year later he left the Board to become Chief Engineer of HSV-7 in Melbourne where he managed the design, procurement and operation of the studio up to and beyond the commencement of TV broadcasts in 1956.

He was a most sought after "expert" on this new medium by technicians and management alike. He remained in his position at HSV-7 until his retirement in 1977, but maintained his interest in television until the very end.

In 1986 the Television Society of Australia presented Mr Fisher with its Colin Bednall Award with the citation "No other single person can be credited with contributing so much over so many years to the national and commercial broadcasting structure, and to the technical excellence of Australia's television industry". He was also presented with an award in 1989 by the Federation of Australian Commercial Television Stations (FACTS).

Those who worked with Jim Fisher remember him as a polite and genial character, whose cultivated sense of humour could discover the lighter side of difficult and complex situations. He was also endowed with a genuine humility and a keen desire to share his knowledge with others. To many he became known simply as "Gentleman Jim" - a man who was born for research work and a man who was made for his times.

[Taken from an article in the Australasian Telephone Collectors Society Newsletter, in turn adapted from a piece by Steve Nason of Telecom Research Labs in the December 1992 issue of *Electronics Australia*.]



Taking Television To The Masses

by Donald Wray

Television, you will remember, was a Londoner's luxury just before the war and then afterwards when the service re-opened. There was much pressure to make it available to the whole country but the range of the VHF transmitters was limited to less than 100 miles, so numerous transmitters were required across the country before such a luxury could be offered to all.

Setting up the transmitters was a straightforward job to be solved by paying money to industry, but getting the TV programme out to the transmitter was a little more difficult in those days. Transmission of such signals was a prerogative of the GPO. But, because wideband signals were not commonplace, the work of developing and installing the first links was undertaken by the radio people (WE Branch) at Dollis Hill.

The first transmitter outside London was at Birmingham. Temporarily, this was supplied with its programme by a 900MHz, multi-hop link starting from the roof of Museum exchange which was conveniently near to the BBC. That link was supplied by GEC. It was soon relegated to standby status as a one inch diameter co-axial cable was equipped to carry the wideband signal. The cable had been installed between London and Birmingham before the war for experimental multi-channel telephony. Quite a lot of new ground was broken at DH in order to deliver the video signal in a satisfactory state.

After Birmingham came transmitters at Manchester, then Wenvoe to feed South Wales and the West country. The Wenvoe link was developed at DH. It used newly developed 4000MHz techniques, many pioneered and "plumbed" at DH, but only for half of the hops. Alternate hops were at the much lower frequency of 200MHz to reduce possible problems with interference from the previous hop. This 4000MHz technology was also used to supply the Isle of Wight transmitter which served the South coast.

To satisfy Northern Ireland was going to be a problem. The project was hurried, somewhat unsophisticated ... but it worked. We set up a number of inverted-V antennas on Black Mountain, to the north of Belfast, to pick up the normal broadcast TV signals from Kirk o' Shotts, more than a hundred miles away. A sensitive receiver extracted the TV signal which modulated a coaxial line system running down the mountainside to a mobile TV transmitter.

Surviving photographs show the tractor - our only means of ferrying equipment to the mountain-top - and the DH team. The interior of our luxurious equipment room - a transportable battery hut - can be seen in a second photograph. At a pinch it could hold two people and about four racks of equipment.

The author has led a long and distinguished career in the Post Office and British Telecom. Dollis Hill is the name of the GPO's old research station, the predecessor of its present establishment at Martlesham Heath.

News From The Past

Two items from *Wireless World*, 14th July, 1938:

A.P. LINE TESTS AFTER HOURS

A *Wireless World* reader happened upon an interesting test by the Alexandra Palace sound transmitter after 11pm on July 1st. A light orchestra in the studio played alternately under "Test A" and "Test B", and enquiry revealed that in one case the modulated microphone currents were being conveyed to the transmitter via line to Broadcasting House and back. In the other, the normal link to the control room was used. The tests were carried out to determine what loss, if any, was noticeable on a long line, and it is understood that the results were of an encouraging nature.

INTERNATIONAL TELEVISION

On the Downs near Brighton experimenters were recently successful in receiving, at good programme value, the television transmissions from the Eiffel Tower. Whilst this does not constitute a record distance for the reception of television, for a Middlesbrough experimenter, at 220 miles, received the Alexandra Palace transmissions a few weeks ago, it does mark a milestone in the history of international television. It must be remembered that the Downs, at the point where the receiver was situated, being approximately 600 feet above sea-level, was an exceptionally good position for the reception of Paris.

A Tirade

*The following piece is an extract from an extremely thoughtful article by Phil Parker in the respected broadcast trade magazine **Broadcast Hardware International** in which he expresses forcefully and convincingly his growing disenchantment and incompatibility with the current scene. Do read it and see what you think.*

I was a broadcaster; my skills happen to have been engineering but the design and equipping of studio centres for the production of programme and distribution of a public service was the objective. And that of my contemporaries. We were lucky enough to work at a time when a television service was being created and it was hard, exciting work and a great deal of fun. I suspect that is not a perk of today.

The current concept of "cost centres" from which a maximised return must be obtained on a purchased licence to transmit "entertainment" to the largest possible audience, in competition with other cost centres, is alien to me. Nor is it one with which I have any sympathy.

I find it also increasingly difficult to keep up with the technology, and the polarisation of the manufacturing industry into a few powerful and foreign companies does not make it any easier.

It is all a far cry from when we Chief Engineers were on first name terms with the manufacturers' development staffs, and MDs for that matter, and the mutual exchange of ideas led to British television hardware manufacture and broadcast service that was without equal in quality. In short I am disenchanted with the industry and the people who have taken it over.

Which brings me to broadcasting in the UK. On January 1st 1993 the biggest change in UK commercial broadcasting since its inception in 1955 took place with, as a result of an auction, four new companies succeeding to unsuccessful incumbents and the whole of the network now free to amalgamate in whatever groups they feel could be profitable, with foreign ownership not excluded.

The fears evoked by the Broadcasting Act, born of dogma and enacted in spite, look like being realised. The unique British compromise that was the Independent Television Companies network has been broken up and the BBC is under threat with a deliberate restriction of its income whilst stipulating that it must maintain a public service, i.e. make the expensive minority-interest programmes and leave profitable game shows and other crap to the ITC franchisees. I wonder if any evaluation of value for money, similar to that the Beeb has regularly to undergo, will ever be required of these new companies.

At the very time when the technology advances are all about fragmentation, new channels and providing cheap technical means of non-studio production, what we are seeing is a closing if the ranks and a reduction in the number of companies. Worse, a closing of studios and wholesale redundancies. Which is a double-edged blow. First, the loss of true engineering staff at the coal face means no feedback to British equipment manufacturers. A more serious loss than it would appear on the surface because we no longer manufacture primary equipment in this country but systems and post-production hard and software. One of the reasons for the success of British companies in this field has been this traditional interplay between customer and supplier.

But equally serious is the "publishing house" concept poses to home programme production. Again, on the face of it, the closing of the franchisees' own studios and the proposed establishment of a central, independent, scheduling office would appear to create more opportunity for independent producers.

Well, so it might but it is unlikely to do the non Sun-reading punter any good. It is obvious what the oft referred-to "market forces" will do to the breadth and quality of output. The evidence is available. Look at the new "brighter" morning programmes and judge the mental level at which they are aimed. Look at Sky One, Lifestyle, MTV, the cable services, even the Children's Channel. Not much from new producers and a minus quantity of what used to be called the fine arts. Take the films and sport away from the BSkyB network and what have you got. For this, on BSkyB's own valuation, the subscriber will have to cough up £240 annually. Any suggestion that the licence fee should be anywhere near this figure would bring the Government down but make your own evaluations.

Producers are not likely to make their fortunes either for the contracts to be offered stipulate that the copyright of the programmes resides with the ITV companies, i.e. just a one-off payment with no repeat fees or income from foreign sales. Nor will the producers be allowed access to the Central Scheduler. Heads I win, tails you lose. Hardly likely to encourage a growth industry in independent

production. Even the American production companies with a much greater home market often sell to the networks at below cost in order to reap the rewards from the foreign market.

As I write however there is a ray of hope for the Office of Fair Trading have objected in the strongest of terms and this time they might even get support from a vacillating Government. As there has been no comment from that source on the published programme schedules of the new companies, which blatantly bear no relation to the promises made when applying for the franchises, I shouldn't bank on it.

The much vaunted improvement in services and greater choice for "Joe Soap" just has not happened. But who ever thought it would? A society committed to measuring worth in terms of return on capital invested is hardly likely to have any sympathy with a public service that considers minorities have rights.

Subscriptions to Broadcast Hardware International cost £54 a year; details on 0628-773935.

Postscript: Here are two recent news items which underline Phil's point. The first quote is from the July/August issue of *Television Buyer* magazine. It is made by Neil Pittaway, Head of Post-Production, BBC Television. He says: "Operating costs are more important to me than picture quality."

And the July/August issue of *International Broadcasting* reports the BBC has replaced retiring director of engineering Bill Dennay, 57, with an appointee from — wait for it — the leisure trade. Rod Lynch, formerly marketing director of the Forte Hotels chain, becomes the managing director of the new resources, engineering and services directorate. Oh well, a man who thinks it's OK to make toasted teacakes on a griddle floating in bacon grease in the Little Chef restaurants is obviously the ideal man to put in charge of a trivial technicality like engineering at the BBC. Pass the sick bag and abandon hope...

Another Look at Telerecordings

Dicky Howett delves non-technically into aspects of filmed TV images.

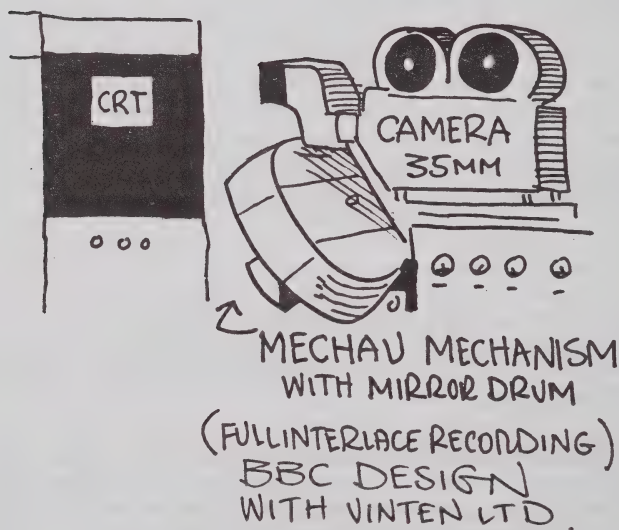
The world's first recording of a television image can be dated as..... well, what's in a date? The BBC reckon they did it first (but then they always do!). This recording was of the Cenotaph ceremony on the 9th November 1947. Of course the big problem with recording an electronic image (high definition only - I'm not including here low-def stuff) on film is hampered by the sheer seemingly incompatible mechanics of it all.

It's true that simply by pointing a cine camera at a TV screen, an image of sorts

will result. But "scan bars" and general picture instability will occur, due to the concomitant unsynchronised shutter/TV scan rate. (Actually an unsynchronised camera with a mirror reflex viewfinder system *can* overcome scan bars by slightly varying the camera's shutter speed. The operator has to keep watching the image through the viewfinder and varying the speed all the time in order to keep the scan bars away.)

For a full-quality recorded image, both fields of the TV interlace (50th sec) have to be recorded by the film camera (running at 25 frames per second). The first stumbling block is that half of the time a cine camera film transport intermittent is blanking out the TV image; this to allow for the film to be pulled down. Engineers had to overcome little problems like that - losing half the picture information.

Initially, an attempt was made to record the *full* interlaced picture. In February 1939, C.O.Browne and Gordon Newton at EMI linked a 35mm Mechau film mechanism with a projection CRT and an image sourced from an Emitron camera. (The German Mechau film system used a drum of eight mirrors that followed and held stationary an image relative to the moving film for the duration of a complete scanning cycle. Mechau projectors were used as telecine machines with Emitron cameras picking up the image by poking into the optical path. Results were quite crude).



The EMI film recording (Paul Lucas "eating" out of a giant tin of Fluxite) displays optical distortions associated with the Mechau system, not helped by appalling studio lighting (an Anglepoise at eye level!). However, the resulting short test film is an impressive demonstration and the system was further developed by the BBC immediately post-war. (If it wasn't for that bloody war we could have had colour TV by 1950! ...and perhaps still have a broadcast TV electronics industry!!)

Another system of film recording was devised by the BBC's Engineering Research Department. This was constructed to record the 1953 Coronation broadcast. The system was called the **Suppressed Frame** method. To quote from a BBC Engineering Monograph (No.1), "...this system means that the recording cycle would consist of exposure only during one whole television frame (field) while the film was stationary in the gate and the pull-down of the film taking place during the next (suppressed) television frame."

In other words, only 202 1/2 lines of picture information gets exposed. This loss was at first regarded as possibly intolerable, but many test recordings (all 35mm film) proved that the loss of vertical resolution was by no means unacceptable. The "missing" lines were spot-wobbled to fill the gaps. (Closed-up viewing of the Coronation film reveals the Queen's eyebrows are missing in some shots, lost between the lines). The final pictorial results always hinged on the line-up skill of the recording engineers. When these Suppressed Frame recordings were good, they were very good.....

Next on the scene (around 1957) came the **Stored Field** system. Here all the lines were recorded, with the alternate vertical scans "stored" in a special CRT as an "afterglow". This "afterglow" was boosted in order to compensate for the decay during storage. Both fields then appeared to have equal intensity when they were exposed together before the camera. It goes without saying that all the above-mentioned systems involved lots of nifty electronics and ingenious "solutions". Later, a 16mm "quick pull-down" system was developed. This system speaks for itself. The film was rushed though the intermittent in order to capture as much of the interfaced picture as possible. (The News at Alexandra Palace used one of these channels... it had a bright blue screen and screamed a lot, as I recall...)

With the advent of tape, (1960ish at the BBC) film recording techniques moved sideways to provide programme export copies and archive material. (It's these "export telerecordings" that saved the BBC's archival bacon when the tapes were eventually wiped).

It's a little-recalled fact that in the mid-1960s, "stored field" recordings were used as a drama production tool. What happened was this. Eager and impatient producers got fed up with the time-consuming, messy and difficult process of VT "editing" (using a microscope and metal adhesive). So what they did was record electronic studio scenes onto tape in the normal way, (perhaps scene by scene) and then later in post-production convert these taped scenes into telerecordings. Once on 35mm film, all the production fluffs, jumps and wobbles were edited out and scenes tightened up or re-arranged, just like a real motion picture. Visually the end results were very dynamic. Exterior "insert" scenes were filmed in the normal way with ordinary 35mm cameras and then edited in with the studio electronic stuff. All very fine, but one could always tell when the medium changed. Even a very high quality 625 line TR is no match for a 35mm movie monochrome image. (Equal to at least 1250 lines). This novel telerecording and film drama system was not seamless, but it

gained favour for a short while. Once tape to tape dubbing with frame accuracy arrived, the old TR drama system flew out the cutting room window. However, it was fortunate that telerecording techniques lasted as long as they did, otherwise we'd have nothing much left to show of the monochrome era.

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Simple Servicing

by Malcolm Burrell

Many large radio and TV repair workshops were equipped with some basic test equipment such as a signal generator and an oscilloscope. Field engineers together with the original proliferation of small dealerships, however, were limited to a few basic tools plus an Avometer. Fault diagnosis was therefore dependent upon experience and an understanding of the circuitry in use.

"Block Diagram" Approach and "Frame" Problems

Fault location in valve-type TV receivers was usually easier than with modern equipment. This was mainly due to the fact that it was possible to imagine the receiver to be composed of a number of separate "blocks". Thus if the screen image collapsed to a single horizontal line (frame collapse) it was probable that the fault lay in the field timebase or field output stage. Usually the engineer immediately tried a replacement valve (or valves) in the hope of curing the defect.

If valve substitution did not provide a solution the engineer would resort to voltage checks and visual inspection. If this proved inconclusive it was necessary to isolate the problem to either the field oscillator or the field output stage. Since the field output stage was designed to operate at 50Hz, injecting a 50Hz signal into the control grid via a 0.1 μ F capacitor should result in a distorted form of field scan if this stage was to be presumed as functioning correctly. The most convenient source of a 50Hz "test" signal was, of course, available in the heater chain - usually on one of the heater pins of the field output valve itself. If successful, attention would then have been directed solely to the field oscillator section.

Check Supplies!

Voltage checks often saved considerable searching. Most importantly, however, a quick check to ensure the HT, mains input and heater supplies were as specified could certainly save considerable effort where the overall receiver performance seemed inferior.

Logic, Line Timebase and EHT

Many faults could be rapidly located by observing symptoms and exercising a logical approach. Of course, as with modern receiver techniques, some stages were interdependent. A flyback type of line output stage, for example, also produced the EHT supply for the CRT final anode together with supplies from the boosted HT rail for the CRT first anode and, in some cases, a supply for the field oscillator or even the audio preamplifier. Knowing the symptoms created by various faults and comparing the subtle discrepancies could save a great deal of time.

Slightly low EHT would result in the screen image appearing overall larger than normal, perhaps with slight defocussing and lack of brilliance. Increasing the

brightness control setting might well result in the picture "ballooning" outwards and perhaps completely disappearing. Often this would indicate poor regulation of the EHT supply caused by a low emission EHT rectifier valve. However, although a replacement often produced an improvement, observation of the image at a very low brilliance setting might reveal the image lacked sufficient horizontal amplitude. That would suggest the output stage was operating at reduced efficiency which would also affect the EHT supply. Attention could then be directed to the line output valve, the output transformer, the drive from the line oscillator etc.

Is it REALLY "Dead"?

Usually a completely "dead" set suggests a power supply fault. No sound or vision, however, might mean anything *but* a "dead" receiver. Are all the valve heaters lit? Is there any illumination (raster) on the screen? If not, is there EHT? Is any form of noise audible from the loudspeaker?

Sync. or AGC?

As another example, assume a set from the mid-sixties where there is uncontrollable picture contrast with perhaps rather "harsh" sound from the loudspeaker. This could denote a fault on the AGC line but a clue might be obtained by attenuating the aerial input signal in which case an unsynchronised image might be resolved. Attention could then be directed to the sync. separator stage. In this circuit the AGC (mean-level AGC) is obtained from the negative bias present on the control grid of the sync. separator valve. The contrast control behaves as a potential divider between the positive HT supply and the negative bias from the sync. separator. If the valve develops a fault or the coupling capacitor becomes leaky, this negative bias will be absent.

Conversely, if attenuating the aerial input produces a weak synchronised image but operating the contrast control has no effect, a voltage check on the AGC line might reveal the absence of negative bias on one side of the feed resistor which in all probability could be open circuit. An interesting note is the cause of a pale but well defined image where the contrast control is again ineffective. A voltage check might almost certainly reveal the HT feed to the control is open circuit.

Sync. or Timebase Fault?

Synchronisation defects could occasionally manifest as loss of either line or field locking. With such faults the "hold" control could be adjusted to perhaps produce a momentarily stationary image which would simply not "lock" solidly. These were often due to sync. separator problems (e.g. high resistance screen grid feed resistor) but could also be due to defects in the coupling of sync. pulses to the respective timebase or a fault in a phase-locked-loop (e.g. flywheel sync.) or a sync. amplifier. Other timebase problems, however, might have been due to a leaky capacitor or alteration of a resistor value to severely alter the speed of the timebase such that operation of the respective "hold" control would not lock the image.

Signal Circuits

The signal circuits of most receivers proved fairly reliable. Where a turret tuner was used, switching channels might produce splashes on the on the screen and audible "clicks" from the loudspeaker to indicate a problem prior to the IF stages, almost

certainly in the tuner unit if investigating a "no signals" fault. Apart from valve problems, HT and screen feed resistors could become open circuit whilst ceramic feed-through capacitors were sometimes prone to S/C.

Often (not always, however) the first IF was common to both sound and vision. This should not be discounted if investigating loss of both signals although sometimes faint programme audio could break through. Complete loss of audio would direct attention to the respective IF or detector stage assuming some audible "hum" were present from the loudspeaker. Touching the "wiper" tag on the volume control should produce "clicks" and increased "hum" if the output stage were operative.

Loss of vision with a healthy raster present could indicate either vision IF, the video detector or the video output stage was at fault. Touching the input to the control grid of the output valve should produce some faint patterning or "hum" bars on the screen. Germanium detector diodes (where used) often became high resistance or S/C and were best checked out of circuit.

Picture Defects

"Flat" highlights giving a restricted greyscale could be due to the detector diode, video amplifier or even a maladjusted interference limiter. A dim picture where highlights began to change to a negative image usually indicated falling CRT emission but it was worth ensuring the heater supply and EHT were as specified by the makers.

A dark picture might be due to a high resistance feed to the CRT first anode whilst a S/C decoupling capacitor in this area would result in complete absence of screen illumination.

Low Volume

Low volume was often due to a defective cathode bypass capacitor, the output valve and in a few cases to partially shorting turns in the output transformer or loudspeaker. A low-gain IF stage (valve fault?) could create similar problems but only after extensive investigation should any attempt at realignment of the tuned circuits have been made.

Interchanging Valves?

Finally, most receivers equipped with valves used a common type in several stages, particularly the IFs where EF50s, EF91s or EF80s proliferated. Since variations occurred in the quality and performance, receiver manufacturers often selected a batch for a specific task. These might have been especially marked with a paint spot. This is one reason it was often advised that valves of a similar type should not be interchanged although from the viewpoint of fault investigation it was often useful to temporarily transpose the vision and sound IF devices in an endeavour, for example, to locate the cause of low audio output.

In The Workshop

BYPASS CAPACITORS

Sometimes fact is stranger than fiction, especially when the fiction is generally taken as the gospel. Here is an extract from *Radio Communication*, May 1993 which we reprint with acknowledgement to the original writers.

Brian Bower G3COJ sends along BBC Technical Memorandum R.1027 (90) *Supply Rail By-passing in Video Circuitry* with which he was involved before his retirement. This is introduced with the statement:

"In video circuitry (frequencies up to about 6MHz) one sometimes sees supply rails with an electrolytic capacitor used for by-passing together with a smaller capacitor, typically a 22n ceramic, across it to improve HF performance. the drawback to this has long been known but it not always appreciated."

The report concludes: "Supply rail by-passing in video circuitry should be by a single capacitor, never by two in parallel. A tantalum capacitor is preferable and arrangements should be made to limit inrush current on switch-on. In more general applications a parallel combination can provide lower impedance decoupling at higher frequencies than a single electrolytic provided that component values are chosen so that the parallel resonance frequency is placed where it will not be a problem - a series element is then optional."

Steve takes the Tube from Derby

by Pat Hildred

I always like to get involved and meet up with people of similar interests, but unlike classic car clubs, railway preservation societies, sports clubs and so on, 405 Alive doesn't necessarily lend itself to regular group meetings. For a start there are not so many of us around and those of us who are interested are normally too widely spread to facilitate such activities.

There is also a wide diversity of interests ranging from domestic sets in general, pre-war only, 1950s, dual-standard, vintage servicing and broadcast gear, test cards and continuity, programme collecting and of course test card music. These people also vary widely in age and experience. Not all these categories might mix with each other as well as one might expect.

However, the distance barrier between Leeds, Nottingham and Derby was bridged and almost all the above interests and categories were covered (apart from sports) on Saturday 16th January by three enthusiasts.

I loaded a big Thorn 'Ultra' 1400 set into the back seat of my Anglia. Being a 23", it filled it completely from side to side! I then sped to Nottingham: destination Steve James's place. Upon arrival I dumped the Anglia and we both departed in his Austin Somerset to hunt down and rescue a Ferguson 536T – a lozenge-shaped TV with radio built in from 1959, also a Defiant TR949T, a weird-looking set from 1949 with the speaker above the 9" tube. These were lurking in damp garages in and around

West Bridgford. Later, after a cup of tea and a bite to eat listening to some unknown but outrageously 60s sounds and watching some superb 60s commercial TV material on Steve's Sony TV9-90 we sped off to meet Peter Stanley in Derby. (This also doubled as a demo run to Steve to prove that it is quite easy to run a 1961 997cc Anglia off the clock at 90mph with a quiet, happy engine, so to his disbelief we whizzed past all and sundry with the needle bouncing off the end stop and many astonished looks!)

Peter greeted us heartily as we stealthily picked our way between mountains of ex-rental colour sets – Philips G8s, K6s, G6s, Thorn 2000s, Thorn 1500 series and Philips Style 70s. We wound our way down to his coal cellar and the sea of floating tubes (which had run aground on this occasion due to low tide!). Peter helped Steve choose a suitable 19" example to take away (see photo). On investigation of his implosion guard collection we decided Bush and Murphy sets of the 60s far beat the rest in weight. They resembled a small rectangle of bullet-proof plate glass shop window nearly half an inch thick!

Much reminiscing was done about the days of 405 lines and the days his shop was brimming with those sets as the colour ones now.

We then went on to his house and admired his garden and the bulbs planted along the border – glass ones, with electron guns sprouting from the top of them. They had been bedded not in compost but in Thorn 1400 faceplates, mainly 23" Fergusons (whole TV fronts) face to earth. That border was headed by a mountain of complete 1400 chassis! After wading through the patio full of various colour panels entwined with grass, we moved into the workshop and finally the house, where, amid copious cups of tea and TV sets, several hours were spent viewing 405-line material direct from a Sony CV-2000 open reel video tape recorder. Various topics were discussed including the merits of 405-line TV, CV-2000, BBC continuity captions, 405-line TV, preserved railways, 405-line TV, classic cars and horrible modern VHS machines.

All in all, a most entertaining evening was had by all, topped off by Peter's mum who expanded our conversation away from TV topics – well done!

Many thanks to Peter and Steve for a great day out; others are planned. I wonder who else we can persuade to join us. Brian Renforth would be good but he's a bit of a long way off. Maybe we can arrange one in the North-East with David Boynes. There seem to be quite a few vintage TV nuts in the Tyne and Wear district. Indeed, I think we're all mad in the North!

As editor I really enjoyed reading this article and I hope you do too. It illustrates nicely the social side of our hobby and I hope some day soon we will be able to arrange informal meetings or get-togethers. Does anyone have any ideas? Would you like to fix up something along these lines?

Pictures on next page:

1. Classic transport for classic enthusiasts - Pat's Anglia and Steve with his Somerset.
2. The 'sea of tubes' – Peter selects a suitable example. Implosion guards in the background.
3. Steve looks suitably impressed.



The Flying Spots

by Gordon Sharpley

No, this is not about a circus act! It is about those monolithic monumental twin lens telecines made by EMI Research laboratories.

I joined Granada Television in Manchester when the studios first opened. After a short period in the maintenance department, it was decided that I should be banished to telecine.

Studio engineers in those days regarded telecine people as strange troglodytes, seldom emerging from their dark catacombs where they practised their discipline. In time, I too learned the black arts like using the de-flickering shims, cleaning the mirrors, oiling the governor and avoiding the EHT!

An EMI film scanning suite (to use its correct title) was really an awesome sight. It consisted of seven bays nearly eight feet high finished in grey hammered paint. A small control desk with a ten inch monitor and a polished oak shelf stuck out from bay two. We had two of these machines. They must have certainly been the largest single piece of picture origination equipment ever made. Even an Ampex VR 1000 complete with its console would look puny beside one. An EMI became part of the building, bolted to the floor with 24 half-inch Rawlbolts and each cabinet bolted at the top to the 'suck' side of the air-conditioning trunking. The main frames of thick angle iron looked as though they were made on the Clyde.

Of course the circuitry was all valves. Near to 100 of them. Every diode was thermionic. Many large valves and power supplies were used to lock the one-third horsepower motor to field drives. EHT at 25kV for the scanning tube was derived from the mains via a large transformer and a voltage multiplier with large capacitors, all in an oil-filled box. I bet it could have given 100mA with ease. A smaller version of this supplied 10kV for the monitor tube. None of your weedy flyback stuff here.

One of our machines had a slide scanner with a separate tube. Changing over the EHT required opening a box on top of the EHT transformer. Despite all the interlocks and great chrome plated discharger balls, something always found enough hysteresis to give you a reminder who was boss. This slide scanner gave the highest resolution picture available on the station (approximately 700 lines per picture width). ...Quite good for the 405-line days.

The success of these telecines was in large part due to the development by EMI of the 11-stage photomultiplier tube and the all-DC coupled video electronics. With DC coupling one could get strange faults. If a valve early in the chain "died" one would find all subsequent stages alternately cut off or glowing red hot. Valves were nice like that: unlike transistors, they did not die without a struggle and gave you a clue to what was wrong.

The flying spots used continuous motion. The film moved smoothly through the gate. No intermittent motion as in cinema projectors. Like a Rolls-Royce, they made very little noise in motion. The gearbox which drove the various sprockets was another beautiful bit of British engineering - all large bronze gears and wormwheels, once again in an oil-filled box. On top of this gearbox sat the governor. I am sure this came from an early wind-up gramophone! If the picture seemed to shrink and stretch in height it was a sure sign that the leather pads on the governor required a drop of 3-

in-1. By skilled mechanical design, the disc of the governor always flicked most of the oil straight into one's eye!

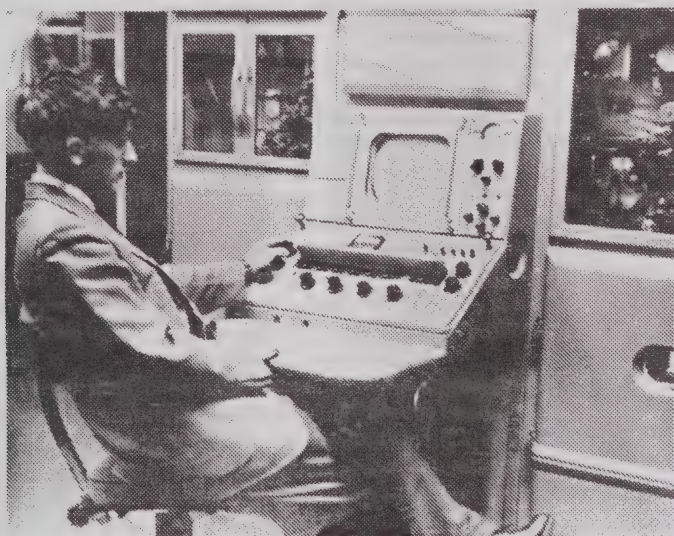
All this ponderous machinery coupled with a substantial flywheel on the motor shaft had considerable inertia. After pressing the stop button it merrily coasted on for about 20 seconds. No problem when running out at the end of a reel of a feature film, but disastrous when running commercial breaks. You would be in the middle of the next break before it stopped.

The only method of rewinding was to take the reels off and do it manually! The problem was overcome with a high-tech idea. A Sturmey Archer bicycle hub brake was fitted to the motor shaft. The Bowden cable was threaded through the machine to a conventional cycle brake lever fitted on the edge of the control desk. Success! A skilled operator could now stop on the exact frame of the next leader.

I remember one time when we had to replace one of these cables. I was dispatched out to Manchester's Deansgate where all the cycle shops were located. I showed my broken cable to one proprietor, who was obviously proud of his knowledge of every part for every bike. Truthfully I told him it was for a flying spot. "Flying Spot?" he said. "Must be foreign bike!" Anyway we found a suitable cable.

I loved those old machines, even with all their idiosyncrasies. I was very sorry to see them go. They were our last link with the old EMI research laboratories where real electronic television was born. I would be pleased to hear from anyone who knows what became of any of the EMIs, especially Nos. 9 and 10.

We'll be happy to pass on letters or phone numbers to Gordon. Incidentally, he writes: "This is my first venture into 'not really technical' writing and I hope it amuses you. I have more tales of strange television activities, like telerecording and the dreaded Eidophor!" We look forward to these with great pleasure. In the meantime, here's a shot of 'Gordon at the Organ' (well, flying spot control panel actually).



Teletalk

by Malcolm Burrell

Learning the HARD way!

Despite an ardent amateur interest in television it was not until the latter part of the sixties that I eventually became a service engineer. Although this was well into the era of dual-standard 405/625 lines receivers a considerable number of 405 lines-only receivers were still in use. Indeed, the Thorn answer to the neat little KB Featherlite was a budget 405 lines VHF 12" portable known as the "980" chassis.

Most of my time was spent with various large rental companies but I spent a couple of relatively peaceful years working for a small local private dealer in Ilford. I had actually been acquainted with the proprietors, who were brothers, since a very early age. Anyway, when their much respected engineer decided to explore the early world of computers the son of one brother was introduced to the firm with me as - primarily - the "bench" engineer. By this time I had already had my fill of customer relations problems and wanted, for a while at least, to concentrate upon TELEVISION as a subject!

It was a neat little workshop situated in an outhouse behind the shop and boasted an Advance signal generator and a small Telequipment oscilloscope. By chance a couple of my uncles had been in the radio and TV trade and I had watched one literally polish a TV chassis which he had serviced. I subsequently concluded from experience that this could be a dubious exercise because its possible to introduce problems which may not previously have existed but nevertheless, this old fashioned approach to the job inspired me to at least give due consideration to the exterior appearance of the repaired product when it was delivered to the customer.

Although I can remember a Bush TV22 being brought into the workshop for a minor repair, these were also the days when some 405 receivers in large walnut cabinets were still in use.

A Lovely Cabinet!

One Philips 21" receiver arrived. I can't recall the problem but do remember that since it was large and the CRT was mounted separately in the cabinet, I decided to upturn the set on an old blanket and work on the underside of the chassis whilst observing the screen in a mirror which was propped against the wall. Unfortunately I hadn't shaken the blanket and it was necessary to drag it with the set around the workshop once or twice. The shock came as we restored the set to its normal upright position because some old screws had been trapped in the blanket. I still wonder how much the firm was charged to get it re-polished!

Stuck!

There was a plastic cabinet Sobell/McMichael 17" portable which seemed prone to noisy edge-type controls. These were virtually impossible to dismantle and all four were held on a single block-panel. Out came some rather nasty Radiospares switch cleaner (in a yellow can)! Immediately the plastic on the controls melted and they became immovable so that I spent the rest of the day trying to get them operable again!

Window Cleaning?

Dial drives on radios were often a problem but once I had the chassis out of the cabinet, it was a grand opportunity to clean the glass. We normally used methylated spirit to clean CRT screens and this was used to clean the dial glass. It was beautifully clean once I'd finished - not a trace of artwork left on it! I still can't recall how we got out of that one! Today I'd either be inclined to play "safe" and rely upon a light dusting or at most use soap and water!

Editor's note: This point needs reinforcing to everyone new to servicing. The legends applied to glass and perspex tuning scales can become INCREDIBLY brittle and will flake off with the slightest provocation. Methylated spirits and other solvents can sometimes produce beautiful tracery of "fern leaves" on these glass scales but the original legends will be lost irreplaceably.

Beginner's Guide to Painting?

Some time later a 19" Pye in a cabinet with a plastic moulded front arrived. Having repaired it I decided to remove the marks from around the screen and mask. The makers had sprayed the mask portion in a grey tone. Somehow it seemed odd once it took on the cream colour of the rest of the moulding! I thus set out to a model shop to procure some Humbrol enamel and spent two days trying to get an even paint texture, then was barely satisfied. Eventually Dave, the field engineer, informed me that it wouldn't matter since the customer was almost blind!

Overhauls

The shop in question was a dealer in Pye, KB and GEC receivers. I developed a lot of respect for KB whilst the "bean"-shaped GEC BT302 series always held a fascination and there were still plenty around. By now, though, the picture tubes were becoming tired and I fitted replacements to several. I believe the field output valve was a 30P12 pentode but I found a PL84 operated well as a replacement. Part of my "overhaul" operation usually involved replacing most of the capacitors on the timebase panel. Having replaced the CRT I did not want the set appearing the next week because of a frame fault. The customer would insist it hadn't been there before!

These sets usually performed extremely well, although they were very prone to alignment problems which could often be cured by adjustment of one of the "beehive" trimmers. Nevertheless, I learned the hard way that although the set appeared to function well, a new picture tube placed a lot of stress on the U47 EHT rectifier with the result that the set might well "bounce" back the following week. So, although it increased the cost, I always estimated for a new replacement, too.

How Do You switch It On?

Later when I rejoined the rental business, a number of dual-standard Philips receivers appeared. These were hybrid sets and featured a volume control combined with the mains switch. Nobody told me that the switch was of the type where you pulled the control knob to switch on. On several occasions, therefore, I was called to "dead" sets and was mystified upon my early encounters that the switch didn't operate when the control was *rotated* and that, apart from the switch being apparently O/C (of course I bridged it and ordered a replacement), there was yet another fault which in most cases was an O/C dropper!

Inflammable Cocktail!

Most workshops operated on a tight budget and some switch cleaners were expensive, such that the stores were often out of stock. I therefore produced my own concoction with a little methylated spirit, switch cleaner, oil, graphite and anything else I could find. It worked effectively until I cleaned a wavechange switch in a radio. Since some tags carried an HT potential my little potion was sufficient to set it alight!

More About Switch Cleaner!

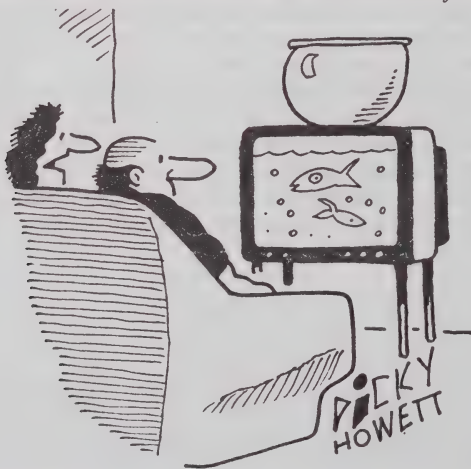
When field servicing I kept a can of switch cleaner in my tool case. Unfortunately the can leaked and the surplus liquid was absorbed by a dropper resistor which I needed to use as a replacement. It was the **ONLY** one of its type I had to hand. The device was easily fitted but upon power-up rapidly engulfed the entire room in a noxious fog! It was a delicate task explaining the problem to the customer and assuring her that the set had not caught fire!

Conned!

Finally, although not a story relating to "vintage" TV, it serves to show that its easy to overlook elementary servicing principles!

Some years ago, one busy Saturday morning, I was called to service a Philips G8 colour receiver which was exhibiting the symptoms of an unstable thyristor power supply. Half the morning was wasted replacing components then trying TWO replacement panels. I was almost desperate but watched in mild interest as a small boy walked into the room to clean the floor with a vacuum cleaner. As soon as he switched-on the fault on the set cleared - until he switched-off again. It transpired that, due to a peculiar fault of the house wiring, the set was receiving about 180V from the mains - until another appliance was connected elsewhere in the room! Why didn't I measure the input voltage?

Of course I could expand upon the day the tailgate on my car flew open and dumped a new colour TV in front of a bus... but that's a story best left untold!



Notes And Queries

How many old TV commercials have survived? [HP]

In fact many (but not all by any means) survive, well back to the 1950s and 60s. Those made since, say, the mid-1970s tend to be held by the ITV Association, formerly the ITV Companies Association, whilst many are still kept by the original advertisers or, more commonly, their advertising agencies. Yet more are in vaults at Pinewood studios, abandoned or forgotten by their owners (but Pinewood are not empowered to destroy them or release them to anyone else). Finally, some are in the care of the History of Advertising Trust (an underfunded organisation) whilst others have been catalogued and copied by an organisation called The Advertising Register (they who supplied the ads for the BBC-2 programme "Washes Whiter" a few years ago).

Copyright still subsists in these commercials as well as other rights of the actors, music and musicians employed, which is why it is sometimes very difficult to get clearance to show them again on television.

For obvious reasons, copies of old commercials are released only on a controlled basis and to organisations who can satisfy the copyright owners of their good intentions (and who can solve the rights issues without incurring the wrath of one of the parties involved). This applies to some extent for all old television and film material. In addition, some of the organisations mentioned do not have the means to provide copies and are not prepared to delve into their holdings without serious money and a letter of commission from a TV programme maker up-front. This makes it difficult for the serious but non-professional researcher. [AE]

Why were there two versions of the guitar music that went with the Southern Television ident?

This has been perplexing several readers: sometimes it ended in a single chord, other times there was an extra twang! A reliable source recalls the longer version was only used before the news, when the ident had the tag caption "The Station that serves the South". The extra length of the music would certainly allow time for this slogan and would give subliminally some added emphasis.

Peter Bowgett agrees that the long version was used before news bulletins and says it was also used at sign-on (Reliable source says it was definitely not part of the opening-up sequence though). The shorter version was used at other times throughout the day, for station identification.

Our reliable source also reminds us that in the black and white days, Southern used a digital "flip-flap" clock, which was considered very trendy in those days (they reverted to a clock with hands in the colour era). During the good old days of black and white, announcements were made in vision, with a look at the clock at strategic times during the day's programming. Following the opening film of the start of day sequence, they went to the Southern symbol, then the station announcer, followed by a clock check, and then the first programme.

You get value with your answers and the rest of this written answer is also kindly provided by our reliable source.

In the 1960s the Southern ident jingle was different. I can't remember how it sounded but I do remember that again there was a special extra ending to it prior to ITN News and there would always be a quick clock check from the digital clock.

Southern always opened up for programmes with an in-vision announcer (except when programmes began with the regional weather forecast on Saturdays and Sundays, as this was presented from the continuity announcer's studio) and in the 1960s there would always be a clock check prior to the start of the first programme, again with the exception of the weather.

As you know, in the black and white days 'Picasso' would be replaced by the Scenes of the South sequence at the start of the final part of Southern Rhapsody. In the days of colour the tuning caption/Transmitters in Service caption was displaced by the Southern symbol and I believe in the latter days of Southern an analogue clock was normally shown in the last 30 seconds or so. All closedowns during the day always consisted of the Southern symbol and the announcement '... and until then Southern Independent Television is closing down.'

The test card (Test Card D) was identified up to mid-1968 as 'TTA Chillerton Down Ch. 11' (Dover had its own test card). From mid-1968 this changed to 'TTA Southern Independent Television' and later (some time on 1971) to 'TTA Southern Television'. As far as I remember, the Picasso tuning signal in the 1960s was identified as 'Southern Independent Television'.

In the mid-1960s I can remember only three main continuity announcers - Brian Nissen, Ian Curry and Vanessa Thorson. In the 1970s Brian Nissen was still there and quite a lot of others, almost entirely male announcers - Martin (I've forgotten his surname but he moved to BBC1/2 as a continuity announcer in the early 1970s), Bill Flynn, Christopher Robbie (also on Thames), Peter Marshall (also on Thames, HTV, etc.), Mike Prince (also on ATV, HTV, Thames, etc. etc.). I hope the above information is useful - it's yet more television history that we can jigsaw together by pooling our memories.

What do the two white dots on Test Card D mean?

This answer comes from page 207 of 'Practical Television Circuits' by R.E.F. Street, 1967.

"A new version of Test Card D came into use in late 1965. The new card is for the most part the same as the original version but the range of brightness in the frequency gratings has been increased. The modified card is identified by a white dot on each side of the letter D near the bottom."

BBC-2 Trade Test colour slides

This subject is from the early days of 625 lines of course but we'll forgive Laurence Piper, who writes this letter from Hertford.

I was pleased with the tape (Idents vol.2), also interested to see the colour trade test picture slides, as I used to view them in the early days of BBC-2. I recognised a few of those on the tape (the boy surrounded by toys, the close-up of the flower, the couple at the cocktail bar, but there are still quite a few I wish to locate that were not on the tape. These are some of the main ones:

- * MAN AND A WOMAN DRESSED IN SKI-ING CLOTHES (goggles, jumpers etc)
- * BOWL OF FRUIT (close-up)
- * GUARDSMAN STANDING BY A SENTRY BOX
- * SMILING LADY WEARING A BONNET (close-up of head)

- * LADY STANDING AT THE FOOT OF A STAIRCASE IN EVENING DRESS
- * BUTTERFLY LANDED ON A GARDEN (close-up)
- * GIRL WEARING MITTENS HOLDING ONTO A BRANCH
- * ANOTHER FLOWER (close-up; appears on TV screen in the colour receiver installation films)
- * PAIR OF SANDALS ON A BEACH (close-up)
- * ANOTHER SHOT OF PEOPLE SITTING AT A COCKTAIL BAR
- * A SHOT OF A CRESCENT-SHAPED CONCRETE BUILDING
- * SHOT OF A COUNTRY HOUSE (Tudor-style; not the ITV one)
- * SWISS-STYLE CLOCK/WATCH REPAIRER
- * LADY IN A LARGE FLOWERY HAT (similar to lady with bonnet)
- * AN OLD-STYLE TELEPHONE BOX

I was wondering if anyone had any of these slides? If so, I would very much like to obtain them (after trying for so long to find any). I would be prepared to pay for the inconvenience of copying them for me, and would cover all costs incurred. Any form of copy would be fine (i.e. on video or as large photo stills or photocopies). Alternatively, if people knew where the BBC obtained these stills, so I could try writing to the company for them. Anyway, well done with the tapes (I hope there will be more in future - there are still many captions that could be used, such as Service Information captions, BBC clocks, other schools cards, tuning signals/clocks. Monday's Newcomers captions, other BBC-2 trade test captions, etc). Thanks for making all this stuff available to everyone.

If anyone has any ideas on Laurence's quest, please share them with us.

I would very much like to know the techniques used to show old 405 taped programmes. Some appear to be electronic conversions, others using modern cameras pointing at monitors. [PG]

It all depends. There are several facilities houses and archives with two-inch VTRs, so there is no difficulty playing out old Quadruplex tapes of the 405-line era. According to Jeffrey Borin, the BBC can play around with the boards in the ACE standards converter to make it convert from 405 to 625. Other organisations may well use optical conversion methods. Many of these old programmes are preserved in the form of film recordings, in which 16mm or 35mm cine cameras were directed at the screen of a TV monitor, showing either a live performance or VTR playback.

The voice on Rediffusion's opening announcement sounds very much like Kenneth Kendall. Did he work there in the late 1950s/early 1960s? [FH]

Does anyone know? Can anyone provide an article on continuity announcers and announcing?

Squeaking tape! I was wondering if any fellow enthusiasts have experienced the problems I have had with half-inch tape. In particular the Sony brands such as V31, V32 and V62 high density, etc. The tape does not discriminate which make of machine it plays on or not! I am referring to the very annoying habit of the video tape playing and then grinding to a halt, while at the same time emitting a horrible

screech. I seem to recall a service bulletin being issued from Sony a few years back on this very same subject but have failed to find a copy nor for that matter anyone who has come up with a cure. I assume it is to do with the lubricant drying out on the tape surface, as affected tape seems to shed more oxide. It is interesting that I have not as yet come across any other brand that does this.

I am concerned about this because the Sony brands seem to have been the most popular in the heyday of open reel VTRs and they seem to turn up more, often with interesting programmes on them. I must also mention that 99 per cent of the time the tape has been stored correctly and more often than not have been used only a handful of times for recording. The machines themselves are also in perfect condition. [Terry Martini].

Which do you want first - the bad news or the bad news? This is a well known problem and is commonly called the sticky binder problem. In fact Barry Fox wrote a long article on the subject in the December 1990 issue of *Studio Sound*.

The 'disease' affects several brands of tape (although Sony suffered very badly) and has nothing to do with either the age of the tape or the way it was stored. It is a manufacturing defect plain and simple, mitigated by the fact that people just did not know so much about making stable, long-life tape in those days. Additionally, most people considered video tape to be a temporary storage medium, not a permanent archiving process, so the problem was not considered a major hindrance. It can be cured only by baking the tape (very carefully!) to dry out the stickiness of the binder material or by lubricating the tape with special fluid to make it slip past the playback head. Both techniques are highly intricate and expensive to carry out - and are not for the amateur.

At the time, Sony was aware of the problem and even set up a process room where tapes from customers who complained were played through a specially lubricated machine and re-recorded onto new tape. Your tapes are well out of guarantee, so Sony would not consider any claim now. There was no lifetime guarantee on tape in those days and in any case, Sony dismantled this process room quite a few years back. The baking technique is known as the XT process and involves baking the tape for up to six days at 50 degrees centigrade. It does not reverse the degradation but makes the tape copyable for about a month. The cost is considerable and is only for professional users.

The extent of the problem is impossible to gauge. It affects chiefly tapes produced between the mid-1970s, when polyurethane binder material came into use, until the mid-1980s, when more modern stabilisers were introduced. Some manufacturers never used polyurethane and did not suffer this problem. Nevertheless, many recording companies and broadcasting organisations are extremely worried, particularly since by the time the problem becomes apparent, it may be too late. Nobody, but nobody, can guarantee the long-term life of tape!

This answer is necessarily brief and desperately oversimplified. I hope it helps though. [AE]

Do any pre-war programmes of BBC television survive?

It depends what you mean. There is a BBC film record of the 1937 coronation also a filmed demonstration film of the first six months of programming. This latter was used regularly until 1939 as a demonstration film, shown every weekday. Two documentary films, **Television Comes to London** (BBC, 1936) and **BBC, The Voice of**

Britain (Post Office Film Unit, 1935) were shown regularly before the war and copies of these survive as well. No day-to-day programming exists, however.
Thanks to Adam Lee of the BBC Film and VT Library for this information.

And now, answers from you folk?

What happened to the magazine *Sounds Vintage*? Does anyone know which was the last issue published? [AE]

Have any Scophony receivers survived? [PW]

Apologies...

... to Tony Clayden, Larry Coalston, Peter Delaney, Des Griffey, Ray Herbert, Dave Hooper, Paul Lee, Brian Renforth, John Shirley, David Smith, Jürgen Valter and all others whose contributions could not be used this time. To get so much good stuff into a 64-page magazine is just impossible, and even the 100 pages in this issue failed to make a dent in all the material waiting to be published. It's likely we'll have to go to 150 pages an issue next year but finding the time to produce it all is another matter. Who ever thought there would be so much interest in 'silly old obsolete television'?!? Which leads onto a ...

Special Announcement: *405 Alive* to split and become two magazines

It is clear that the magazine cannot go on in its present form. Both the magazine and the membership are reaching a critical size where an 'all things for all men' approach is no longer appropriate.

In particular, a lot of the readers are saying they do not find the deeply technical articles of any interest. On the other hand, some people like nothing more than a good technical description of a particular TV receiver and its servicing foibles. So it's time to make a radical decision, namely to split the magazine. Issue 20, the next one, will be the last *405 Alive* in its present form. After that, the highly technical articles (and the advertisements for TV sets and spares) will be in a separate bulletin, *405 Tech*, which will appear once or twice a year (depending on material). You, the reader, can choose which magazine or magazines you wish to subscribe to – there will be a form with issue 20.

As far as *405 Tech* is concerned, it will appear not on a fixed date but when there is sufficient material to fill a 48 or 64-page magazine. We'll take money for two issues but if there is not enough material for two issues in a year, then you'll get your second issue later. Nobody will be swindled.

Nor is this a cunning ruse to squeeze more money out of readers. Currently you pay £13 for a guaranteed minimum of four 64-page issues (256 pages) although this year there have been two bonus issues so you in fact had 328 pages. Next year it is envisaged to produce either four 100-page issues (400 pages) or three 150-page issues

(450 pages total) and **there will be no price increase** unless postage rises by a significant amount. So £13 will buy you more for your money next year. The only changes will be for foreign subscriptions, where the supplement does not cover the true additional cost of airmail postage. Britain seems to have the highest postal charges in the world!

Editorial policy will not change (much). The only difference may be a little more coverage of the Baird and early 625-line eras. Our guiding policy is still to cover the golden era of black and white television.

More letters...

From Jeff Longbottom, 45 South Drive, Harwood, Bolton, BL2 3NL:

I'm attempting to document details of the original colour schemes employed on the outside broadcast vehicles of all the ITV companies. To date I have managed to obtain this information on each of them, with the exception of:

1. Associated-Rediffusion (prior to the dark blue) - was the colour scheme altered at the time of the name change to Rediffusion?

2. Scottish Television.

3. Tyne Tees Television.

4. TWW.

Any information would be appreciated.

From Jacob O'Callaghan, SAPPHIA, Hornsey:

Thanks for your piece about our efforts to save and restore the Alexandra Palace television studios. By the way, we are in close touch with the TV Trust.

Since the visit, and perhaps partly because of it, we have persuaded the Palace Trust to at least pay for a new(ish) roof for the south-east wing, which is a start. Of course, it seems it is now the sole remnant of 40s and early 50s British television, with the utterly philistine and disgraceful destruction of Lime Grove (should have been listed for its association with Hitchcock alone). This makes us even more determined on saving the Palace.

David Cleveland's piece had a special interest for me. I used to know him through Essex University film society (I was better known as Brian then but reverted to my other name - too many Monty Python jokes). He and David Wyatt were the reason for my first and only visit to Ally Pally as working TV studios when David Wyatt was a film editor there. I'm glad these clever chaps are still flourishing!

People interested in more information on saving AP's television studios or making a visit to their remains can get in touch with Jacob on 081-348 7563.

From Paul Sawtell, Stourbridge:

Quick bit of feedback on 'what has happened to Lionel Rubin?' (the drummer on Lunchbox).

Lionel is alive and well, living in Hinckley, Leics. and it has always been a pleasure to work with him, as I have done on many occasions. He is not so busy now, but after a glittering career as one of the country's top session drummers he went on to take his own bands aboard luxury cruise liners. He still does quite a few jazz gigs (which is where I tend to bump into him nowadays) and manages to

keep alive that fresh sparkling humour of the type seemingly unique to musicians.

I cannot help with Alan Graham unfortunately but maybe if anyone is sufficiently interested, they might contact the Birmingham branch of the Musicians' Union, Bristol Street, Birmingham.

It's Competition Time!

Yes, the subscription rate will have to go up next year to compensate for the 100- page issue size but you now have the chance to **win your subscription for nothing!**

In the unretouched true-life photograph below you see Mary and David 'Modulator' Newman fighting over Bill Journeaux's underpants - but why? Best caption that puts words in their mouth wins a year's subscription worth £16, £17, £20 or whatever we're going to charge next year.

All suggestions are welcome, although because *405 Alive* is a family magazine, any smutty captions will not be printed. Don't let that deter you from submitting them though! Send all entries to the normal address (you must know it by now) to arrive by the end of September.



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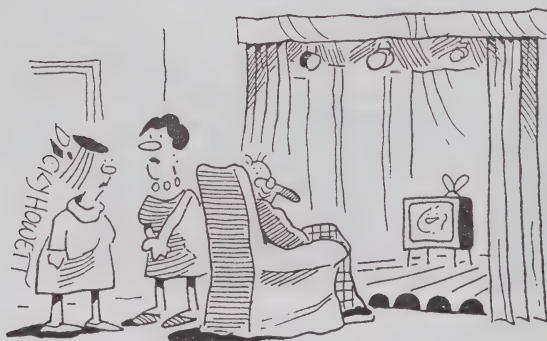
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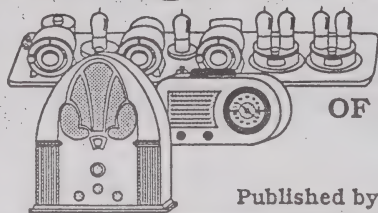
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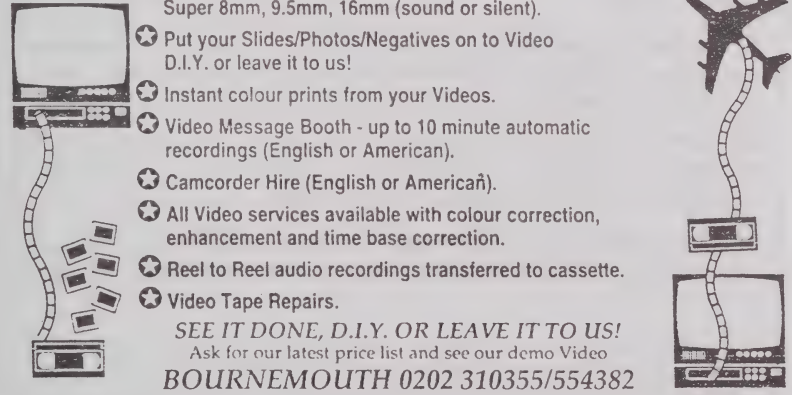
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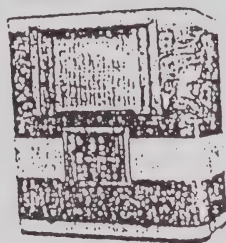
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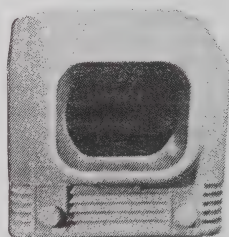
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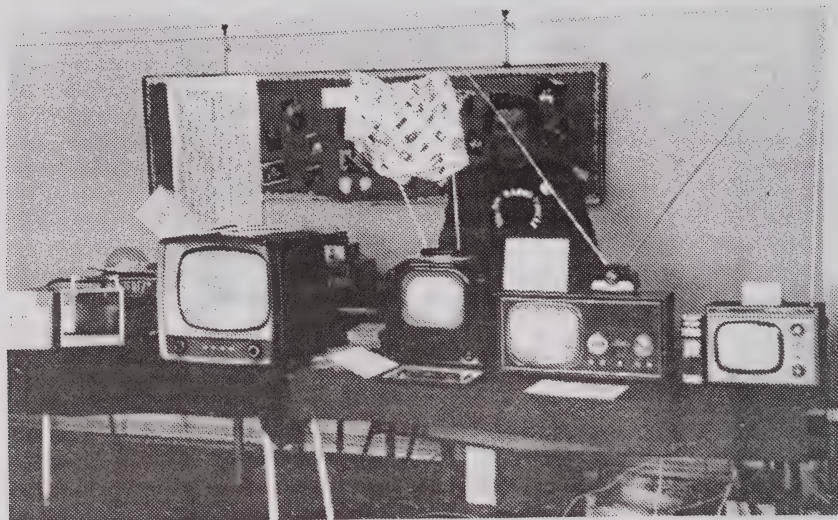
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Two more pictures of Bill Journeaux's vintage television display at a Vintage Radio Circle meeting earlier this year. One of the sets in the upper photograph sports the infamous trunks again, whilst the set on the far right is a very rare Perdio Portorama with UHF tuner.



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625 TO 405 LINES STANDARDS CONVERTER

This new product from Pineapple Video uses the latest in frame-store chip technology to provide a sophisticated product at a very reasonable cost. Available either as a complete boxed unit with mains power supply, or just as a PCB card, the converter provides a fully interpolated CCIR standard 405-line output waveform. The PCB card requires just an unregulated 7 to 9 volt power supply and produces a 1 volt, 75 ohm output from any normal 625-line signal (including VHS).

Features:

- Full 625-line field-store
- Full interpolation from 625 to 405 lines, no lines dropped
- Low power consumption - 500mA at 7 to 9V DC
- 8-bit digital signal processing
- Output sampling rate of 10MHz ensures frequency response in excess of 5MHz
- Stable output even with VHS recorder inputs
- CCIR spec. 405-line sync pulses
- Available as single PCB (approx. 6" x 3") or boxed with mains power supply
- Low cost: prices start at £249 for the basic card.

Send SAE for further details and order form. Carriage is free but VAT is extra.

O.B. MANIA

It affects different people in different ways. Hairy Dave went to the British Amateur Television Club's convention at Harlaxton earlier this year, where BATC stalwarts Brian Summers and Richard Harris had brought along their ex-BBC outside broadcast vans (and cameras and tripods and monitors and...). Anyway, Dave was so impressed he had to have one as well (yes, an outside broadcast van). One quick phone call to Martin Joannou at BBC Redundant Plant, Avenue House elicited the information that a VT van based on a Bedford TK chassis was languishing at Cardiff and could be his for a very modest sum.

Mrs Howett was there as well, trying to keep a firm rein on Dicky, and drew the line at a *real* O.B. van parked on the drive. So Dicky had to make do with the next best thing!

This pristine Dinky 'Roving Eye' was spotted by Dicky at this year's Vintage Communications Fair (held annually in May at the National Exhibition Centre). He says: "The cameraman and the aerial are the genuine thing. This is what to look out for. Some models have reproductions of the missing items (lost by children years ago). These repro parts are a good idea if it save the toy from the scrap heap, but an original and complete toy is the most sought after."

Look out in your local paper for toy collectors' fairs if you too would like to add an outside broadcast van to your collection. We covered these Dinky Supertoys in the magazine several issues back - in a nutshell there were three BBC vehicles (this one, a control room and a microwave aerial on an extending ladder. Later on they re-issued two of them in a less authentic form, in ABC television livery. There was also a Citroen estate car in Radio-Tele-Luxembourg colours. Spare parts, transfers and rubber tyres are available from a model shop in Raynes Park - the address was in the previous article.



MARKET PLACE

This is the area for buying and selling all kinds of things to do with television, new or old.

Want to join in? Then send us your advertisement: there is no charge, although if space is short we may have to "prune" out the least relevant adverts or hold them over until next time. Advertisements are normally inserted for two issues: please indicate if you wish your ad. to run longer. There's no extra charge but we try to avoid repeating "stale" material.

Traders are also welcome here but we do require people who are commercial dealers to state this in their advertisements. The letter (T) at the end of an advertisement indicates that the advertisement is "trade".

Test card music and old TV programmes are is subject to the same rules of copyright as other recorded works and it is unlawful to *sell* amateur or professional recordings of same. Swapping same for no gain is probably not illegal but *405 Alive* does not want to test the law on this subject so we will only accept advertisements from people who will indemnify us in this respect.

Whilst care is taken to establish the *bona fides* of advertisers, readers are strongly recommended to take their own precaution before parting with money in response to an advertisement. We do not accept any responsibility for dealings resulting from these advertisements, which are published in good faith. That said, we will endeavour to deal sympathetically and effectively with any difficulties but at our discretion. Fortunately we have had no problems yet. In related collecting fields, replicas and reproductions can be difficult to identify, so beware of any items "of doubtful origin" and assure yourself of the authenticity of anything you propose buying. And try to have fun: after all, it's only a hobby!

STANDARDS CONVERTERS. See issue 17 for a construction article and a review of the Pineapple Video ready-made product, the review in this issue, also David Looser's advertisement in this section for a conversion service.

MODULATORS. Two designs for

modulators have been published in *Television* magazine - see issue 1 of *405 Alive*, pages 10/11. We can supply photocopies at 10p a page. Alternatively you can buy ready-built modulators from Wilfried Meier and David Newman (see ad in this section).

COMPONENTS. Most valves and other components are not hard to find: we can mention **Billington Export** (0403-784961, £50 minimum order), **Colomer Ltd** (081-743 0899), **Kenzen** (021-446 4346), **Wilson Valves** (0484-654650, 420774), **Philip Taylor** (0702-258598), **Sound Systems of Suffolk** (0473-721493) and **PM Components** (0474-560521). For hard-to-find transistors we have heard of **AQL Technology** (0252-341711) **The Semiconductor Archives** (081-691 7908), **Vectis Components Ltd.** (0705-669885) and **Universal Semiconductor Devices Ltd.** (0494- 791289). NB: Several of these firms have minimum order levels of between £10 and £20. For American books on old radio and TV, also all manner of spares, try **Antique Radio Supply**, (phone 0101-602-820 5411 (fax 0101-602 820 4643). Their mail order service is first-class and they have a beautiful free colour catalogue (or is it color catalog?). Would you like to recommend other firms? If you think a firm gives good service please tell us all!

HOW TO WRITE CLASSIFIED ADVERTISEMENTS THAT WORK

1. Start by mentioning the product or service you are selling or want. By doing so, you make it easier for the reader.
2. Always include the price. Research has shown that 52 per cent of people who read classified ads will not respond to ads that fail to mention a price.
3. Keep abbreviations to a minimum. Will the reader know what a NB207 is? If it's a 1956 12" table model TV, say so!

4. Put yourself in the position of the reader. Is all the information included?

STANDARDS CONVERSION: Coming soon, a professionally designed unit for 405 enthusiasts. Prices start around £250 in kit form up to £800 for a fully-built professional unit. For more information contact me, Dave Grant. Phone 0689-857086 or through the Vintage Wireless Museum in London.

STANDARDS CONVERSION SERVICE: I will convert your 625-line tapes to broadcast-standard 405 lines on my digital line-store standards converter. Free of charge to subscribers of **405 Alive**. Please send blank tape (VHS only) for output and return postage. Input tapes can be accepted on Philips 1700, EIAJ, Video2000, Beta or VHS. David Looser, Maristow, Holbrook Road, Harkstead, IPSWICH, Suffolk, IP9 1BP. Phone 0473-328649. *(Publisher's note: David's offer is a most generous one and users may care to send him a free-will donation towards his not insubstantial construction costs as well. There may be a delay in handling conversions if many people take up his offer.)*

AVAILABLE AGAIN after two years: Paste Polishing No. 5. Connoisseurs will know that this paste is the ideal material for cleaning bakelite and other plastics (even plastic baths!). Unlike Brasso and other liquid polishes, it leaves no active residue, and as it also contains a waxy agent, it also gives a gloss finish. Paste Polishing No. 5 is the stuff the Post Office used to polish up the old bakelite phones and is marvellous stuff - ask any user!

Unfortunately the demand for it is reduced nowadays (BT doesn't need it now!), so it is only manufactured at intervals. A batch has just been made and you can have a carton of 12 tubes for £12.24, post paid and including VAT. Smaller quantities are not available from Greycate, only in multiples of 12 tubes. Send your order to Greycate Chemical Company, Fir Tree Lane, Groby, Leicester, LE6 0FH. (Tel:

0533-877777). And do it today while stocks are still available!

(If you really want only one or two tubes, small quantities were available at time of writing from THE RADIOPHILE, "Larkhill", Newport Road, Woodseaves, Stafford, ST20 0NP at £1.95 a tube plus postage.)

VINTAGE TVs, radios and testgear repaired and restored. Personal attention to every job and moderate prices. Estimates without obligation - deal with an enthusiast! (BVWS and BATC member) Please include SAE with all enquiries - thanks. Dave Higginson, 28 High Street, Misterton, Doncaster, Yorks., DN10 4BU. (T). Tel: 0427 - 890768.

FOR SALE: Vintage valve specialist. Valves for your 405 line TV (and other equipment) supplied by Kenzen, Unit 9, 16-20 George Street, Balsall Heath, BIRMINGHAM B12 9RG. Please telephone 021-446 4346 for a quotation or write enclosing SAE. For our latest free lists please send A4 SAE with 36p stamp. We also supply video monitors, computers, test gear, oscilloscopes, etc at bargain prices for callers. Please telephone first if you wish to pay us a visit. (T)

OFFICIAL BINDERS FOR 405 ALIVE

Tony Clayden now has a supply of A5-format Easibinders for filing your copies of this magazine (or any other similar sized publication!). Unlike most binders of this kind, which have a magazine title gold-blocked on them, Tony's ones do not; instead they have a clear pocket where you can insert a paper label, making them much more useful. Buy loads and bind all kinds of other magazines too! A binder holds up to 12 magazines and there are two colours, dark green and brown, and the price is just £4.95 plus £1 post and packing. Include a sticky label with your name and address, but no stamps; postage is paid. Cheques made out to A.M. Clayden please: he lives at 64 Exeter Road, London, N14 5JS.

VALVE SALE: New boxed valves by Mullard, Mazda, Brimar, etc. All types £1 each, 10 per cent discount for orders 10-plus, 25 per cent discount for 50-plus. Quantities of each type vary from 1 to 75.

6BW7, 6CD69, 6F1, 6F12, 6F15, 6F23, 6F25, 6F26, 6F28, 6F29, 6F30, 6L18, 6/30L2, 12AH8, 12AT6, 12BA6, 12BE6, 19AQ5, 20L1, 20P3, 20P4, 20P5, 30C1, 30C15, 30C17, 30F5, 30FL1, 30FL2, 30FL12, 30L1, 30L15, 30L17, 30P12, 30P16, 30P18, 30PL1, 30PL13, 30PL15.

DY86/7, DY802, EB91, EBF87, EC90, ECC81, ECC82, ECC84, ECC85, ECF86, ECH81, ECL80, ECL82, ECL83, EF42, EF80, EF85, EF91, EF95, EH90, EL86, EL95, EY51, EY83, EY86/7, HK90, PABC80, PC86, PC88, PC97, PC900, PCC84, PCC85, PCC89, PCC189, PCF80, PCF82, PCF84, PCF86, PCF200, PCF801, PCF802, PCF805, PCF806, PCF808, PCL82, PCL83, PCL84, PCL86, PCL88, PFL200, PL36, PL81, PL82, PL83, PL84, PL508, PY33, PY81, PY82, PY83, PY88, PY800, PD500.

R.M. Webb, 78 Station Road, Rolleston, BURTON-ON-TRENT, DE13 9AB. Tel: 0283-814582.

FOR SALE: Printed circuit board for David Looser's design of Band I modulator. Size 160 x 100 mm, undrilled. £10 including post and packing. Dave Boynes, 12 The Garth, Winlaton, Blaydon, NE21 6DD. Tel: 091-414 4751.

FOR SALE: Decca 1000 projection set, provincial (tunable) model, to produce 4' x 3' picture. Complete with original paperwork, circuit diagrams, instructions, cabinet has only a few scratches. Very restorable. Not expensive, offers. Paul Athay, Barbican, The Copse, Frome, Som., BA11 2TE. Tel: 0373-463474.

FOR SALE: Murphy test pattern generator, tunable over Band I, superior quality with proper interlaced picture. Plus Band III and Sound additions and power supply. Complete and working (this is unusual!), a rare opportunity to acquire a very desirable piece of kit from the mid/late 1950s. Giveaway price to good home, buyer

must collect. Brian Alderson G3KJX, 43 Brompton Road, Northallerton, Yorks., DL6 1ED. Tel: 0609-772702.

FOR SALE: Same as above but without the Band III adapter, £20 the pair. Must be collected and during working hours. Ring 081-684 1233 daytime and speak to Mr Cumming or Mr Chapman. Mitchells TV Service Centre, Thornton Heath, London.

FOR SALE: various 1950s TVs - Pye, Bush, Ekco, etc, some in very good condition and none over £50. Steve Harris, 0244-661062.

FOR SALE: 1967 25" Philips G6, good condition, working, £50. Single- standard 22" G6, good condition, £25. Cabinet for Murphy V310AD 17" console with tambour sliding doors, good condition, £5. Early 1950s Decca 1000 projection TV, good condition, £100. Geoff Turner 0684-566979 (Worcs.).

FOR SALE: Murphy 14" TV, bought for the Coronation in 1953, plus Band III converter. Mahogany cabinet, excellent condition. Offers around £50? Mrs Bowles, Brighton (0273-506162).

FOR SALE: Stella dual-standard colour TV. Immaculate case with tambour doors, however not working. One lady owner from new. Phone Willie Mykura on 0501-85401 or Pat Hildred on 0532-402841. Set is in east-central Scotland.

FOR SALE: 1930s 9.5mm home movie outfit in fair, used condition (not tested). Comprises silent projector plus spare bulbs, Pathescope Motocamera (clockwork with built-in lens f3.5-14) in leather case, half- dozen films (Mickey Mouse, home movies), Boots screen (probably 1960s). Offers? Arthur Michell, 112 Towcester Road, Northampton (0604- 764437).

FOR SALE: I have a Mullard 12" CRT circa 1950, ideal for restoring a set, £25. Think ahead - get in a spare now. Some new 17" CRTs available, please ask. May be able to deliver. Realistic

prices, ring for details. Dave Higginson, 28 High Street, Misterton, Doncaster, Yorks., DN10 4BU. (T). Tel: 0427 - 890768.

NOT FOR SALE: We regret all the Antiference Vantenna VHF set-top aerials being sold by Bob Webb have now all gone.

FOR SALE: A copy of the BBC "Black Book", i.e. Birkinshaw's Technical Manual of the Marconi-EMI System, London Television Station. About 120 loose-leaf pages, printed between 1937 and 1950, in original black binder. Complete and in very fair condition. Highly desirable to the serious collector and researcher, this is a scarce book which seldom appears on the open market; the last time a copy was advertised (by Bampton Books) it was priced at £500. Realistic offers will be considered by the owner: write to box 405 care of this magazine's editorial address.

FOR SALE OR SWAP: Marconi 705 TV, circa 1937. Michael Bennett-Levy, tel: 031-665 5753, fax: 031-665 2839.

FOR SALE: BBC camera talkback headsets, late 1950s style, set of three, £5 each. 96-way bantam audio jackfields. 1U rackmount, set of 2, £12 each. Ops/mtce manuals for BVU800P VCR, DXC6000P camera, BVT800PS TBC, BVE800 editor, WEX2000P MXR expander £10 each. Ops manuals for BVE910 editor £15, VP2 char. gen. £10. DXC6000P camera £2.50. Postage extra. Willing to swap for manuals on Philips LDK5 or Rank Cintel Mk3 TK machine. Nigel Phillips, Poole 0202-670733.

RARITIES FOR SALE: 625-line 11" picture monitor by Murphy, designed to be dual standard (405/625) but 405 section never fitted. Made to high standard for GPO, used condition but fully working, handy thing to have, £10.

RCA 36-slide capacity twin-drum slide projector, with handbook and all accessories. This was part of the original installation at Anglia TV, Norwich in 1959 and was used with a vidicon camera for station IDs and spot advertisements (no, the original slides are not still in it!). Price

£50. Andy Emmerson, Northampton 0604-844130.

FOR SALE: Peto-Scott (Philips in disguise) ET2770 1" educational VTR (1960s) in good mechanical and cosmetic condition. Supplied with 2 tapes, photocopy of instructions, circuit diagram and service info. Nivico small battery portable VTR PV-4500. Heavy Nivico mains VTR. Shibaden SV-700 VTR plus 12 tapes new and used. All items apparently complete and in good order but untested. Offers/enquiries to Alan Carter, Croydon 081-688 7344.

FOR SALE: Mullard projection television tube, type MW6-2. New and boxed, dated 1952. £15 or very near offer. **WANTED:** Power supply unit for Sony portable reel-to-reel video AV3420CE. [Editor's note: these are usually in stock at Anchor Surplus in Nottingham]. Phone Terry Martini on 071-790 6807.

FOR SALE: Back numbers of early *Practical Wireless* and *Practical Television* monthly magazines. History in the reading. Only £1 each plus postage.

PRACTICAL WIRELESS

1948, July only;
1952, Oct, Nov, Dec;
1953, Jan-April, June-Dec;
1954, Jan-Dec complete year;
1955, Jan-Dec complete year;
1956, Jan-March, June-Dec;
1957, Jan-Dec complete year;
1958, Jan-Dec complete year;
1959, Jan, Feb;
Total 75 copies, £1 each or £70 the lot, plus postage.

PRACTICAL TELEVISION

1955, Mar-Aug, Oct-Dec;
1956, Jan-Feb, May-Dec;
1957, Jan-March;
1960, Dec only;
1963, Sept only;
1964, Jan-May;
1965, Nov only;

1966, June only;

1967, April only;

Total 32 copies, £1 each or £27.50 the lot, plus postage. Mike Sage, 168 Torbay Road, Harrow, Middx., HA2 9QL. Tel: 081-422 0814.

FOR SALE: TV-related books and magazines from £2 to £10. Ring for list. Philips 385U 9" table top TV, circa 1949. Wedge-shaped metal back, similar to Baird Everyman. In as found condition, £100. Pye V09 table top TV. Circa 1951, 9" version of the Pye V4 set, in as found condition, £100. Barrie Portas, Grimsby 0472-824839.

FOR SALE: TV sets as follows. Alba T641 (mid-50s), Philips 1745U (mid-50s), Murphy V214 (early 50s), Cossor 949 (late 50s), Ultra 1770 (1960), Ferguson 725 (slimline, 1960). All under £30. Pat Hildred, phone 0532-402841.

ATTENTION ALL HALF-INCH VIDEO FANS! New from Sony, your last chance to buy half-inch video tape. V62 (7" spool) £2.50; V60H (5" spool for portables/table models) £1.00 each. Discount on bulk orders for V60H only. WANTED: colour and b/w EIAJ VTRs. Pat Hildred, 0532-402841 evenings, 0532-706066 day.

FOR SALE: Cossor 935 Radio-TV- Gramophone. Consists of 405 line set, radio and turntable in dark walnut cabinet. Collect or deliver. Must go by April at latest! Nick Fyffe (Berks.), 0734-342273.

FOR SALE: 'The Television Annual for 1956'. Bags of information about 1950s tv. Lots of pictures. Clean copy. No d/w. £8. 'ITV 1972' (The days when ITV was ITV). Lots of pictures of studios and transmitters. Slightly grubby and corner-creased cover o/w good copy. £5. 'The Boys and Girls Book of Films and Television'. Some decent photos of movie technology plus a section on 'How TV Works' including shots of one of ATV's Elstree studios (Pye Mk 5 cameras) and control room. Also a picture of Baird's 'Electron' camera (1937). No d/w. Good copy £5. 'Television Engineering, Principles and Practice. Volume One. Amos/Birkinshaw, BBC second

edition, 1963. Very clean copy, no d/w. £6. 'The Tellybook', Chris Kelly, 1986. Loads of studio and technique photos. Large picture book format, clean copy. £6. All post free. Sawps (see WANTED) considered on any of above. But hurry - my last ad sold out within a week! Contact Dicky Howett, 23, Micawber Way, Chelmsford, Essex CM1 4UG (phone 0245-441811).

FOR SALE: Japanese electrostatic CRTs made in early 1940s (WW II radar), both tested good and with specifications one is SSE120G (120mm, green, £16), the other is SSE75G (75mm, green, £13). Socket for SSE75G £3. Electromagnetic CRT for flying spot scanner, usable but screen is a bit burnt, with specifications £10. Studio flying spot scanner (RS-170) made by Kowa, apparently complete but untested, with circuit diagram and service info £50. Shipping extra. Wanted: Small old TVs with electrostatic CRT. Any books and circuit diagrams relating to above TVs. Noriyoshi Tezuka, 1-10-7- 807 Higashigotanda, Shinagawaku, Tokyo 141, Japan. Tel. from UK: 0101 81 3-3440 8392. Fax: 0101 81 3440 8396.

FOR SALE Sound and vision modulator for Band 1 VHF channels (tunable). Ready built, endorsed by Bill Journeaux, price £30 + £3 postage or £4.70 by guaranteed courier service. Add £5 for 12V power supply (or use your own). One-hour 405-line VHS tape of ITA Test Card C, £7 post-paid. David Newman, 79 Alder Road, Parkstone, Poole, Dorset, BH12 2AB. Tel: 0202-731000.

FOR SALE New book, *The Story of BBC Colour Television*, 32pp, some in colour. £3.95 post paid: send your order and cheque made out to HS PUBLICATIONS, 7 Epping Close, Derby, DE3 4HR.

FOR SALE: Prowest PM19/1 black and white 19" monitor (broadcast standard). 405/625 lines, solid state, fair condition. £20. Jeffrey Borin, 081-863 2880.

FOR SALE: Philips projection TV, model 1700, serial no. 3544, no CRT. Allegedly bought in

1940. Mr George, 071-277 8776.

FOR SALE: Marconi combined radio/TV console 1949 model VCR52A, £95 or near offer. Michael Usher, Bedford 0234-354767.

FOR SALE: GEC BT5146 television, circa 1955. Sell or swap for 1930s/40s radio. Carlo Mezzatesta, Whittlesey, near Peterborough. Tel: 0733-350563.

FOR SALE: Bush TV75C £5; Thorn 980 (12" 405-line portable) £10; GEC 19" 625-only hybrid colour TV, offers please; Pye CT205 22" 625-only hybrid colour TV (697 chassis), offers please; Marconiphone 4659 24" dual standard b/w (1400 chassis) £10. Phil Marrison, 0283-790747.

FOR SALE: Sony 625-line reel-to-reel VTR equipment. DV-2400ACE, the first portable machine (portable equivalent of the CV-2100), AV-3670ACE mains VTR (with approx. 20 tapes, mains adapter for camera, RF converter). Price negotiable. Roland Pickett, 0733-245240 (near Peterborough).

FOR SALE: Shibaden SV-700 reel-to-reel VTR (625 lines) in good order with two reels of tape and handbook. Only nominal price if it goes to a good home, but would prefer swap for UK or USA military radio equipment of WW2 or anything else of radio interest. Graham Richardson G7HCR, tel: 0406-26007 (Holbeach, Lincs.).

FOR SALE: Books on early television. **Television** (Edgarr H. Felix), Maple Press, 1931, 266 pp plus index, 71 photos or diagrams, VGC, \$75. **Radiomovies, Radiovision, Television** (C. Francis Jenkins) National Capital Press, 1929. 143 pp with many b/w illustrations. VGC, \$150. **Vision by Radio, Radio Photographs** (C. Francis Jenkins), National capital Press, 1925. 140 pp with many b/w illustrations. Cover and spine badly water-stained, end papers soiled, hinges slightly loos, otherwise inside pages are very good. \$85. All prices post-paid. Rainy Day Books, P.O. Box 775 Fitzwilliam, NH 03447, USA (0101-603-585-3448).

FOR SALE: BOOKS: "The Television Annual for 1961" (Baily), 160 pages, over 160 illustrations, good condition. 1961 is the scarcest year of this series of books: £9 post paid. **The Grammar of Television Production** (Davis), learn about TV production and spot the mistakes in programmes. Two copies, both ex-library, £1.50 each post paid. **"Electric Lighting"** (1927 edition), a practical guide to the wiring of houses and the installing of electric-light plants. Paperback, 150pp, well illustrated. Well-read copy, hence just £2 post paid. Copies of **Television and Short wave World** for the months June, July, August, November 1938; May, October 1939; August, September 1940. One only of each, in well-read condition £2 each post paid (first come, first served!). Two Panasonic J35 VHS video recorders for sale in as-new condition, very little use, £100 each or £185 the pair. Why am I advertising them here? Well, they are ideal for 405 lines, being modern machines from a quality manufacturer. They have no ghost at all on 405, with a very stable picture and lots of 'expensive machine' facilities like insert editing and audio dubbing. Two years old or so but like new, ideal for a 405 dubbing setup. Ring to check items unsold before sending money. Andy Emmerson, 0604-844130.

FOR SALE: Marconi TV and radio 10" screen, model VRC52A of 1949. Heavy lump, £100. Box of 80 mains droppers for TVs, some new and used ones of 1950 onwards, £10 the lot. Box of TV knobs from 1949 onwards, approx. 300 in all, £20 the lot. Sobell 17" T178, £15. Enquiries on 0732- 823674. R. James, Iona, Pinesfield Lane, Trottiscliffe, Kent, ME19 5EN.

FOR SALE: Invicta 9" console TV; Ekco 12" table TV with Band III tuner fitted; Ferguson 16" dual-standard Courier portable; Pye 12" monitor (as used in OB vehicle); Bush TV165 19" dual-standard; two 15MHz oscilloscopes (Solartron CD1400R and Telequipment D43R); CRTs AW53-88 good condition, GEC 6504A doubtful, Mullard 36-24 good, Mullard A56-120X believed OK. The Invicta and Pye TVs show every sign of

life (good bright raster) and the scopes are in good working order. I therefore naturally hope to get a fair price for these items. Everything else needs a good home for a few pounds. John R. Huntingford, 'Astro-Lode', Hog's Back, Guildford, Surrey, GU3 1DD. Tel: 0483-505504.

FOR SALE: Philips TV Receiver, Console Model 1747U, 16" screen, cabinet in mint condition, with original instruction booklet. Was used to watch the Coronation in 1953. Closest offer to £50. Mrs J. Morris, 24 Embassy Road, Whitehall, Bristol, BS5 7EB.

FOR SALE: Dual-standard colour TV, Stella 25" with tambour doors, not working but physically in immaculate condition. One elderly lady owner from new! Phone 0501-85401 Willie Mykura (east central Scotland) or Pat Hildred on 0532-402841 for information. Not expensive!

FOR SALE: Alba T641 (1955), Philips 1745U (1955), Cossor 949 (1958), Ultra 1770 (1960). Philips free to good home, others under £30. Pat Hildred, Leeds (0532-402841).

FOR SALE: 1950s portable TV. Murphy V230. Was working until recently with poor frame hold but not on channel 1, £10. GEC BT1155 14" set, circa 1957, good condition apart from a little damage to rear cover, £10. Ekco T368 17" table model, c. 1960. Nice shiny cabinet, although slight damage. Untested, £5. Wanted: rear cover for Bush TV22. Please telephone Des Griffey on Luton 0582- 582144.

FOR SALE: Murphy V120 b/w TV, complete but needs some work. Steve Sylvester, 27 Cliffe Avenue, Rustington, Sleaford, Lincs..

FOR SALE: MUSA video jackfields, complete with U-links, terminated in bare-end PSF 1/3m cable, £10 each. 8-way mains distribution panel, £7.50. Video distribution amps, 4 inputs each with 5 outputs, £10. All above are in 19" rack mounts. Two 33-pin edit control cables suitable for any Sony parallel control VCRs or edit controllers, 8 metres each, £15 for the pair.

Postage extra on all items. Nigel Phillips, 80 Johnston Road, Oakdale, Poole, Dorset, BH15 3HT (0202-670733).

FOR SALE: HMV 1901, 15" tube combined TV and radiogram, rather large; HMV 1806 chassis for 15" tube; Ferranti console 12" tube, complete; Pye LV20 9" TV. £100 the lot. R. James, Iona, Pinesfield Lane, Trottisccliffe, Kent, ME19 5EN (Fairseat 0732-823674). *Editor's note: Trottisccliffe is pronounced Trossley by most of the locals!*

LOOKING FOR UNUSUAL OR HARD-TO-FIND CONNECTORS OR LEADS for your video camera, computer or VCR? NICAM, ATARI, SEGA, etc.. Try A.R. Communications on 0302-321066 Monday to Fridays 10 until 6. Access and Visa accepted.

ANNOUNCEMENT: Those of you who registered an interest in the "slide tapes" should contact me now! AE.

BUY THIS NOW... while it's still in print! JUST A FEW LINES, the history of the start of BBC television in 1932 from the basement of Broadcasting House, using the Baird mechanical system. Written by Tony Bridgewater, the sole survivor of the original technical team. Beautifully printed on art paper, 20 pages, over 40 illustrations including rare historical photographs. £3.50 a copy post-paid from Robert Hawes, 63 Manor Road, Tottenham, LONDON, N17 0JH. Allow 14 days for delivery.

OFFERED: Help with documentation. Some crystals 41.5MHz £6 each plus postage or I can bring them to a swapmeet. C-mount lens Schneider Xenon 1:2/50 £25 each. Some Philips 625-line cameras LDH0026. Jac Janssen, Hoge Ham 117d, NL-5104 JD, Dongen, The Netherlands. Tel: (evenings) from UK: 010 31 1623- 18158. Fax (office): 010 31 13- 624626.

FREE - YOUR AD COULD BE HERE
There's no charge at all if you're a subscriber ...

RADIO ENTHUSIASTS... We all remember Caroline etc. but what about the land-based pirates? I have recordings of the Northwest-based stations going back to the early 1970s. Send for list to Radiogold Tapes, 43 Cheetham Hill Road, Dukinfield, Ches. SK16 5KL or ring Andy on 061-303 8857 (T).

INTERESTED in telephones and telegraphs? The Telecomms Heritage Group is for you then, with four magazines and at least one swapmeet a year. Send SAE to THG, 12 Westbrook Avenue, Hampton, Middx., TW12 2RE..

WANTED: I have a children's toy filmstrip viewer in the form of a TV set (made by S.E.L.) but no film for it. Do you have a film in its magazine for this tiem? Gordon Bussey, 64 Pampisford Road, Purley, Surrey, CR8 2NE. (081-660 2240)

WANTED: A 1950s colour set or monitor - I'm determined to try 405-line NTSC colour! David Boynes, 12 The Garth, Winlaton, Blaydon, NE21 6DD. Tel: 091-414 4751.

WANTED TO BUY: We supply props to the BBC and need to buy *working* dual-standard TV sets, 405-line TVs, old VCRs, VTRs and early home computers. We will pay a very fair price for these but they must look clean and be in good working order! George Apter, Studio & TV Hire Ltd, 3 Ariel Way, Wood Lane, White City, LONDON, W12 7SL. Tel: office hours 081-749 3445, home 071-724 3122.

WANTED: Emblem-cover for tuning holes on 1960 HMV 1910 with piano-key tuning selector. Please call if you think you have one. Also knobs for Murphy V214. Pat Hildred, 0532-402841.

WANTED: Mains adapter to take 5- amp round pin plug, to fit 13-amp socket. David Smith, 50 Hollycroft, Hinckley, Leics., LE10 0HG.

WANTED: Plug-in flywheel sync panel for McMichael MT762/3 or Sobell ST196 dual-standard/convertible receiver. 625 lines doesn't take too kindly to direct sync! Brian Renforth, 174

Helmsley Road, Sandford, NEWCASTLE-UPON-TYNE, NE2 1RD.

WANTED: Line output transformer for HMV 1807 (=Marconiphone VRC74) console TV with radio. David Boynes, 12 The Garth, Winlaton, BALYDON, NE21 6DD (091-414 4751).

WANTED: Ekco TSC48 television, will pay good price. Phone Shawn on Kidderminster 0562-746860.

WANTED: Radio and Television Servicing, volumes 1 through 6. Also Broadcasters, Radio and TV Serviceman's Manuals. Noriyoshi Tezuka, 1-10-7-807 Higashigotanda, Shinagawaku, Tokyo 141, Japan. Tel. from UK: 0101 81 3-3440 8392. Fax: 010 81 3 3440 8396.

WANTED: Any items relating to John Logie Baird - electrical, mechanical, ephemera, etc. including television, facsimile, radar, undersocks, etc. Please give me details and price. Michael Bennett-Levy, tel: 031-665 5753, fax: 031-665 2839.

WANTED: Taylor Hobson or Dallmeyer Image Orthicon camera lenses. 5 inch and 8 inch required to complete a set. TV 88 fitting. Also Image Orthicon camera/channel. **Must** be ex-broadcast with a history. Working not essential. Also: Handbooks. Camera cue-light domes, logos, TV station ident badges. Product brochures. Anything that will throw light on the selling and use of broadcast equipment. Good money or swaps considered. Please contact Dicky Howett, 0245-441811 (23 Micawber Way, Chelmsford, Essex, CM1 4UG).

WANTED: Old VTRs for formats NOT included in the list of my collection on page 45 of issue 15. Particularly National cartridge (EIAJ) and Philips 1970s 1 inch machine, and Wesgrove/Telcan machine. I will also be glad to clear machines, tapes etc of any format at no charge! Also require late 50s Sobell 405 TV with VHF radio inside. Martin Loach, Oxford 735821.

WANTED: XLR round 3-pin panel mounting sockets, must be in good condition, urgently wanted for restoration of OB Van termination panel. Pye, EMI, and Marconi television product catalogues for 1950 - 1970 for research for article/book.

B. Summers G8GQS 081 998 4739 (Answerphone)

WANTED: Frame transformer for Pye LV30/BV30 or LV51/BV51 and a line output transformer for Decca 1000. Peter Atkinson 0797-22547 or evening 0797-227163.

WANTED: Pre-war TV, any make. CRT 3/1, 3/2, 3/3, 6/6 or equivalent. Cabinet, back and knobs for Ekco TA201. I can come and collect. Can anyone help me with documentation? Information on standards conversion is appreciated - thank you! **OFFERED:** help with documentation. Some crystals 41.5MHz £6 each plus postage or I can bring them to a swapmeet. C-mount lens Schneider Xenon 1:2/50 £25 each. Some Philips 625-line cameras LDH0026. Jac Janssen, Hoge Ham 117d, NL-5104 JD, Dongen, The Netherlands. Tel: (evenings) from UK: 010 31 1623-18158. Fax (office): 010 31 13-624626.

WANTED: Doctor Who on 16mm or video transfer (Hartnell and Troughton). Good prices paid. Ronald McDevitt, 49 Forth View, Inverkeithing, Fife, KY11 1BA or call 0383-415665.

WANTED: Episode of Doctor Who on b/w film, any gauge, any quality, any condition, anything at all in fact. Paul Lee, 1 Beacon Hill, Sadberge, Darlington, Co. Durham, DL1 3JS.

WANTED: a 1950s console TV, preferably Cossor or Ekco and 9" screen. Ian Humphrey, 8 Reedman Road, Sawley, Long Eaton, Nottingham. Tel: Long Eaton 734977.

WANTED: I am looking for examples of early colour TVs, especially dual- standard Bush, Murphy, Thorn, Pye or Decca models. Anything unusual would be of particular interest. I am also seeking examples of two early post-war GEC models, BT7092 and BT2147, and of course anything pre-war (isn't everyone?!?). My telephone number is Coddensham 0449 79-366. Mike King, Crowfield Cottage, Stone Street, Crowfield, Ipswich, Suffolk, IP6 9TA.

WANTED: Television material from the 1950s. Has anyone a video of sports programmes from the 1950s? Also the 'Hundred Great Sporting Moments' shown occasionally on BBC2. I have programmes which may be of interest to swap and will refund any expenses. David Smith, 0455- 230553.

WANTED: Old studio equipment - camera pedestal, pan & tilt head (wedge fitting), 625 colour SPG, other studio items would be of interests including the possibility of a complete O.B. truck, the older the better. Steve Harris, 0244- 661062.

WANTED: 1. Cue lamp dome for broadcast camera, standard three-sided red plastic type. 2. *Basic Television* part two (Technical Press). 3. Buy/borrow/swap old TV programmes on 16mm film. I'm gradually building up an interesting archive! Andy Emmerson, 71 Falcutt Way, Northampton, NN2 8PH. 0604-844130.

WANTED: I need a 12" electrostatic CRT (GEC type 4603 or any other type) to repair a pre-war TV I have just bought. Can you help? Swap or cash. I am also after a vision-only receiver - serious money offered. I can pick up goods in Britain. Rudi Sillen, Limberg 31, B-2230 HERSELT, Belgium. Tel. from

UK: 010 32 14-546889.

WANTED: Pre-war TV, any make, any condition. Pye B16T. CRTs 3/3, 3/16 and 3/1, also 6/6 (or equivalent 6/4). I can collect. Pre-war books on TV. Data on Ekco TX275. Please help me with standards conversion (625->405 and/or 625->819). If you have a Philips 663A or know of it, please exchange findings with me. Offered: help with documentation. Some crystals 41.5MHz at cost (£6 each plus postage, or I can bring them to a swapmeet). Jac Janssen, Hoge Ham 117d, 5104JD DONGEN, The Netherlands. Tel. (evenings) from UK: 010 31 1623-18158. Thanks!

WANTED: Pye broadcast equipment, the mauve and light blue valve type. What have you? Information on the Pye Broadcast Staticon camera, type 2130 D6Y. Need manual, lenses, any info. Michael Bond, 0733-53998.

WANTED: old **ATV Television Show Books**, number 2 and up. Also wanted 16mm opt. sound ATV logo, starts. Mr D.W. Probert, 16 Woden Road East, Wednesbury, West Midlands, WS10 0RG.

WANTED: ITV year books from first edition (?1962) to the last. Also prints/slides of test cards/tuning signals used by the BBC/ITA. Also ITA Trade test music play lists/PasBs for schedules covering the following periods: first and second six months of 1958, second six months of 1959. Any information on the above schedules would be very much appreciated. Malcolm O'Neill, 80 Welbeck Road, Carshalton, Surrey, SM5 1TA.

WANTED: *The Authority's Transmitters* (an early ITV publication) and BBC television publicity handouts of the 1950s and 60s. Andy Emmerson, 71 Falcutt Way, Northampton, NN2 8PH.

WANTED: OLD CAMERA TUBES and similar imaging devices of various types and age (and related data, etc.) sought for historic (!) collection. Particularly welcome would be an Orthicon, EMI 9831 vidicons, an Ebitron or a 1.5" vidicon. Tubes that are not operable are suitable, so if you replace tubes in cameras please don't throw the old ones away but contact Peter Delaney, 6 East View Close, Wargrave, Berks., RG10 8BJ (tel: Wargrave 0734-403121).

WANTED: by VT engineer. Dinky BBC mobile control room (model no. 967) and extending mast vehicle (no. 969). Interested in any model toys with TV or film connections. Also wanted, information, photos on any scanners in use from 1968 to the present day. Will pay sensible prices for good condition models and information. Nigel Phillips, 80 Johnstone Road, Oakdale, Poole, Dorset, BH15 3HT. Tel: 0202-670733.

WANTED: Early Doctor Whos, particularly *Planet of the Giants*, also Harry Worth programmes from 1964-65, even if only on audio. Early Sykes, *Meet the Wife*, 1960s Northern comedies. *Z Cars* episode 'All in a Day's Work', starring Wendy Hillier, tx 18.11.64. Also anything on Harry Worth, pre-1966. *The Army Game*, *Bootsie and Snudge*, Arthur Haynes/Nicholas Parsons sketches, *Mr Ed* episode 'Ed the Stoolpigeon', *Sea Hunt*, starring Lloyd Bridges, *Whirlybirds*. Also *Popeye* cartoon c. 1953, title unknown but theme is of Jack and the Beanstalk. Also Eric Sykes 1964 episodes, colour c. 1974 remake of 'Sykes and a Caravan'. Radio and TV Times books late 1964. B. Howarth, 1 Alexandria Drive, Westthoughton, Bolton, Lancs., BL5 3HP.

WANTED: all 405 line equipment, sets, videos and especially a 405 line monitor (green or b/w). Also recording of old ITA knight and early Doctor Whos wanted. Telephone Peter Matthews on 0206-796544.

WANTED: Does anyone have recordings of the music used on BBC2 trade test transmissions during 1963/4? Please contact Paul Sawtell, Toad Hall, 20 Seymour Road, Wollescote, Stourbridge, West Midlands, DY9 8TB or ring 0384-896679. Thanks!

WANTED: Video recorder capable of playback on VHF Band I channel 1, also any 405 line sets and related items. Peter Matthews, Canzone del Mare, 70 Speedwell Road, Colchester, Essex, CO2 8DT. Tel.: 0206-796544.

WANTED: Any Philips dual-standard colour TV, pref 500 series 25" screen but not too fussy. Must be branded Philips and a dual-standard. Gordon Bussey, 64 Pampisford Road, Purley, Surrey, CR8 2NE. Tel: 081-660 2240.

WANTED: Service and/or operating instructions for Cossor model 1320 television alignment generator, and for Radar (Waveforms) Ltd model 202 CRT tester/reactivator. Also wanted: sale information, brochures on KB 'VV' series receivers (circa 1963) for purchase or copy. M.J. Izucky, 14 Cedar Close, Market Deeping, Peterborough, PE6 8BD.

WANTED: Dual-standard TV set. Good price paid for a working model. A non- working set will be considered as long as it is complete and undamaged. Phone Richard Dent on 0525-385374 (Beds.)

WANTED: Sinclair micro-TVs, both bent and straight tube versions, projection TVs, test cards, Baird televisor and Baird televisor disc. Any 1930s TV from any country - possible trade for the latter (and/or cash) HMV combined radio/TV model 905 (pre-war). I will ship or import. Please state your own price. Michael Bennett-Levy, Edinburgh. Tel: 031-665 5753, fax 031- 665 2839.

WANTED: Does anyone have an old Fringevision catalogue dating from around the early 1960s? The firm was located in Marlborough, Wilts. and offered aerial components. Would borrow or swap for a number of (random) pre-1960s *Practical Televisions*. Roger Bunney, 33 Cherville Street, Romsey, Hants., SO51 8FB.

WANTED: Bakelite Bush TV (TV22, 32 or 62). For sale or exchange: black DAC90 radio in good working condition. David Smith, tel: 0455- 612965 (Leics.).

WANTED: Channel 1 coils or complete tuner for Ekco TMB272 9" portable. Line output transformer for Pye VT4. Instructions and sales sheets/booklets for both of these sets.

HELP WANTED: in obtaining the following items. Philips N1700 VCR service data; Sony VO1810 low-band U- Matic VCR service data; Bell & Howell type 636 16mm projector service data, power supply unit and lens; Siemens type 2000 16mm projector, service data and lens. All expenses and reasonable costs will be met. Terry 071-790 7499.

HELP WANTED/FOR SALE: Can anyone identify these LOPTs for me? Thorn Jellypot PRT 0604-005-3675, TXB8-C604-005-001. Any interest? I have a small quantity of new ones. Thorn 950 Mk 1 ITT sealed EHT tray. Also have new Thorn 1400 main smoothing caps. I need new 1500 smoothing caps and EHT trays, also 1690 LOPTs which seem to be unobtainable now. R.E. Bailey, 51 Robin Gardens, Waterlooville, Hants., PO8 9XF.

WANTED: Sony DV-2400ACE 625- line portable reel-to-reel video recorder and power supply. Also required: power unit for Sony AV- 3420CE portable VTR; Philips N1500 VCR and a supply of video heads. Terry Martini, 071-790 6807 (fax 071- 702 8774).

WANTED: "Z Cars" episode titled "All in a Day's Work" screened 18th November 1964. Also Harry Worth items mainly from that era, even if only clips ("Here's Harry"). Require Radio Times and TV Times from November/December 1964. B. Howarth, 1 Alexandria Drive, Westhoughton, Bolton, Lancs., BL5 3HF.

WANTED: HT transformer for a Pye 2780 14" video monitor (or a complete monitor, working or not). Andy Emmerson, 0604-844130.

WANTED: Line output transformer for the Murphy "Barrell" V310 TV. This is for the wireless museum at Arreton Manor on the Isle of Wight. I have a brand-new LOPT of the same physical dimensions but it has one terminal fewer and different winding resistances (probably for 200 or 400 series). Anyone who wants it is welcome to it! Mr Plant, 0983- 520087.

WANTED: Marconiphone combined TV/radio. Send offer to Enrico Tedeschi, P.O. Box 10, 00125 Roma, Italy or from UK phone/fax 010 396 52356085.

WANTED: 1964 episode of "Here's Harry" starring Harry Worth, with the caricature introduction only used that year. Titles e.g. The Quarrel, The Suitor with Gwendolyn Watts and Bert Palmer. Good reward for the finding of these. Also "Sykes" episodes from 1964, e.g. Sykes and a Gold, Sykes and a Caravan. Early "Doctor Who" story Planet of the Giants and The Edge of Destruction. Arthur Haynes comedy sketches from 196, ITV test card music from 1958 (Prince Igor, and Poloteian Dances by Borodin, Serenata by Leroy Anderson, At Last at Last and other Parisian music. Also issue of *Radio Times* and *TV Times* from November to December 1964. TV Times book covering end of 1963 and beginning of 1964. B. Howarth, 1 Alexandria Drive, Westhoughton, Lancs., BL5 3HF.

WANTED: Rubber mask for 9" RT (TV22 type would be OK). Line output transformer for TV22. CRT type MW22-14C. Viewmaster cabinet(s) 9" and/or 12". Derek Gibson, 12 John Brunner Crescent, Northwich, Ches. CW8 1DH.

WANTED: LOPT for Alba T432 series or can anyone help with a source? Brian Mitchell, 0634-220134.

WANTED: "White Horses", any episode of the TV series shown in the early 1960s, either video (any format) or 16mm. To buy or to borrow or a copy, any quaoity acceptable, even an audio recording. Philip Howard, Dalkeith Auctions, P.O. Box 4, Bournemouth, BH1 1YL.

WANTED: Old toys, especially old toy televisions, telephones, radios, in fact any elctrical household items. We are specialist dealers in clockwork, electric, etc. tin boats, trains, planes and cars. Call us at **Now and Then** on 031-668 2927. (T).

WANTED: 7" CRT 3/2 for pre-war TV. Low emission or ion burn would do as mine is broken. Also LOPT for TV22, outer knobs for Bush TV62, frame transformer for Pye LV30, LOPT for Decca 1000. Peter Atkinson, 0797-227163.

WANTED: HMV Fringevision 14" or 17" TV models 1828 or 1830 table sets, also chassis (more or less

complete) for pre-war HMV model 907 or Marconi 709 TV sets. Michael Usher, Bedford 0234-354767.

STILL WANTED: Invicta T102 frame osc. transformer. CRTS CRM92 and 6501. TV sets Vidor CN377, Mullard MTS 389, Marconi VC73 and a pre-war set. R. Howells, 6 Dunlin Drive, Kidderminster, Worcs., DY10 4TA.

WANTED: Marconiphone TV/radio, even if not working if price is right. Will collect. Enrico Tedeschi, P.O. Box 10, 00125 Roma, Italy. Fax: 010 39 6 52356085.

HELP WANTED: I'm looking for a video tape, or good audio cassette of the soundtrack, of an LWT play broadcast on ITV 12.4.69 called "Moonlight on the Highway", about a young man obsessed with Al Bowly. Ray Pallett, 226 Station Road, Leigh-on-Sea, Essex, SS9 3BS.

HELP WANTED: Can anyone help a new reader? I am really interested in any material about the Bush TV62: promotional material or an instruction booklet especially. Copying expenses repaid. Brian Webb, The Bungalow, Bible Fields, Dummer, Basingstoke, Hants., RG25 2AN (0256-397739).

BUY/SWAP LP records and recordings used on ITV trade test transmissions 1957 to 1967. I am only 20 records short. Ray West, 55 Hampton Road, Warwick, CV34 6JL.

SWAP: I have user handbooks for the Cossor models 930T and 934, also Bush TV24 (the last is a bit dog-eared). I'll be pleased to swap all three for the Bush TV22 instructions (I don't want to sell them). Andy Emmerson, 0604-844130.

SWAP: I have a spare copy of RADIO & TV SERVICING 1963/64 Models by Hawker and Reddihough, in reasonable condition. Would swap for 1 (or 2) VHS tapes of vintage TV material. 625 lines preferred. Steve Evans, 181 Curborough Road, Lichfield, Staffs., WS13 7PW. Tel: 0543-252915.

SWAP: Service manual for Ferranti T1325 and T1825 televisions, including Ferranti sales brochure on T129 and T138. Also *Which?* magazine reviews of TV sets from 1961 to 1969, very interesting with many photos. Willing to swap for any information on Philips LDK5, EMI 2001 or rank Cintel Mk 3 TK machine, or just send £1.50 to cover postage. Nigel Phillips, 80 Johnston Road, Oakdale, Poole, Dorset, BH15 3HT. Tel: 0202-670733.

SWAP: Collector of tape recorders has a number of TV and video valves (unused) available for swap against old valve tape recorder equipment such as Vortexion, Ferrograph, Revox. Interested in tape recorders in general. M. Cross, Aylesbury 0296-86623.

TELECINE (standard 8, super 8, 9.5 and 16mm) and 525/625 PAL/SECAM/NTSC standards conversion work. Personal service using professional equipment, by a 405 enthusiast at competitive prices. Send large SAE for full details or describe your specific requirements. We regret we cannot handle 405/625 conversions! Lionel Fynn, Plato Video, 70 Richmond Hill, Bournemouth, BH2 6JA. Tel: 0202-24382.

CALLING ALL DXers! Keep up to date with *Teleradio News*, the only magazine for dedicated enthusiasts. Six issues a year cost you just £7.50 post paid, so send your name and address with a

cheque made out to HS PUBLICATIONS, 7 Epping Close, Derby, DE3 4HR.

AND IF YOU'RE AFTER THE VERY LATEST INFO ON SATELLITE TELEVISION ... you should be reading **Transponder**, the definitive subscription newsletter. For details ring 0270-580099 or send SAE to Transponder, P.O. Box 112, Crewe, Cheshire, CW2 7DS.

MOMI - THE WORLD'S MOST EXCITING CINEMA AND TELEVISION MUSEUM. South Bank, London SE1. Tel 071-928 3535 (switchboard) or 071- 401 2636 (recorded information line).

NATIONAL MUSEUM OF PHOTOGRAPHY, FILM AND TELEVISION. Never mind about the first two, you'll find the television section interesting enough. Location is Prince's View, Bradford, Yorks., BD5 0TR. Telephone 0274-727488. Open Tuesdays to Sundays 10.30 - 18.00. Closed Mondays.

ON THE AIR Vintage Sound and Vision is a new venue for vintage broadcasting enthusiasts. Situated in Chester's major antiques centre, ON THE AIR has a constantly changing stock of vintage wireless, television and related items. Please write (enclosing SAE) or phone for further details and to ensure personal attention before calling. Open Monday to Saturday 10.00 - 5.30. ON THE AIR, Melody's Antique Galleries, 32 City Road, Chester. Tel: 0244 - 328968 or 661062.

TEST CARD & IDENT VIDEOS FOR SALE: 55 minute video presentation made for the BATC "The Development of the TV Test Card". Andrew Emmerson interviews George Hersee, designer of Test Card F. Lots of old test cards included.

Also ... "Exotic TV Idents" covering East Germany, USSR, Poland, Czechoslovakia, Estonia and Romania, Mongolia, Libya, Algeria, New York, "BBC London" and many west European countries and satellite channels. Further expanded edition, now includes several USA idents as well as test cards from Slovakia, Ukraine, Angola, Armenia, Bulgaria and Cyprus. In all there are well over 100 test cards, station idents, news programmes and start-of-day recordings, lasting over an hour.

And now... Idents Tapes 1 and 2. Literally hundreds of vintage and recent TV test cards, captions, idents etc from Britain, Ireland and the rest of the world. Two E-180s crammed full!

All titles cost £9.99 per tape, VHS PAL only. Please allow 14 days for delivery. Andy Emmerson, below.

TELECINE: At last - an affordable telecine service! I can transfer 16mm films (not other gauges, sorry) to VHS or S-VHS. You can collect/deliver and supply your own tape to save money if you prefer. Equipment has 430 lines resolution (better than S-VHS!) and handles optical and magnetic sound. Ring or send SAE for details. Andy Emmerson G8PTH, 71 Falcutt Way, Northampton, NN2 8PH. Tel: 0604- 844130.

GOOD HOMES WANTED!

The following items have been offered free of charge or almost free by their generous owners, though they will doubtless accept small donations if you are pleased with what you get! This latter kind of gesture goes down well since in many instances the advertisers are not members of our group and are pensioners, widows, etc.. Where no phone number is given please enclose SAE with your letter, it's only fair.

In each case the advertiser has agreed to hold the items for one month from publication - after then it's probably the corporation rubbish dump or an antique shop. You have been warned!

KB table model of 1960, probably 17". Not working but ideal for spares and anyway, it's free. Mr Godwin, 0784-434603 (Egham, Surrey).

GEC model 2100 or 2014 dating from 1965. 19" dual standard, in good working order. Peter Cromeey, 081-997 7632 (Ealing, London W5).

Floor-standing TVs with doors, about 14" screen. Pye V7CDL, Murphy V216C, Pilot (model unknown). Also 14" table-top Kolster-Brandes set. Jeff Willingham, Flat 1, 33 Queen's Road, Weston-Super-Mare, BS23 2LH. Tel: 0934-624945.

Decca 1000 projection set, with screen. Cabinet is rough but it's free! E.G. Darker, Hemel Hempstead 0442-252836.

Decca 121 projection set, apparently complete and in good condition visually. Shame to consign it to the tip. Norman Joss, Dundee 0382-79411.

Chassis and circuit diagram for V600 TV set (make unknown), last used 1958. 12-inch CRT is CRM121, so this might be useful to someone even if the rest of the chassis is not. Jack Waller, 0789-521282.

ViewMaster set, circa 1950. Emerson 17" table model, round tube, E700 or E701, with turret tuner for 13 channels. Murphy transistorised set, V2427 24" approx., chassis type A816C, with stand. Ferguson model 3653. Rediffusion 405/625 set, locked on 405, 19" tube, no tuner (cable set). Philips type G19T212 (210 chassis). Bush TV94 405-line set, released spring 1960, with circuit diagram and spare new tube rebuilt by Lawson. Philips model 19TG-156A 405/625. Argonaut AM/FM tuner/receiver with booklet. Most parts for the *Electronic Engineering* home-built televisor from around 1948 plus booklet. Book on Complete Home Entertainment (TV, radio, record player). Circuit diagram for HMV 1825/6 series. "Really need the space so all these items are free if collected. Won't say no to some payment of course. Jim Jefferies, 1 Grwyney Place, Argoed, Blackwood, Gwent, NP2 0HE. Not on phone but can call my sister next door on 0495-220075."

Two Philips projection sets, cabinets leave something to be desired but clearly useful for spares. Free but a small donation would be appreciated. Brian Chafer, Cricklewood (north-west London), 081-458 5163 evenings.

Wobulator by Samwell & Hutton, type 36A, all complete. Mr Drybrough, Dolfin Cottage, Mounts Lane, Newnham, Daventry, Northants., NN11 6ES (0327-703964).

HOW TO CONTACT 405 ALIVE

The chief glory of every people arises from its authors.

-- Samuel Johnson

We want to hear from YOU! This is **your** magazine, so please send in your letters, notes and articles; don't be bashful, other people will be interested in what you're doing! As we do this for fun, not profit, we regret that we cannot pay for contributions but authors are encouraged to retain their copyright and are free to publish their articles in other publications as well. Send us your advertisements too.

If at all possible, please TYPE your contributions using a dark, black ribbon. This enables them to be read straight into the word-processor by a document scanner. Magic!

Contributions on computer disk are particularly welcome and your disk will be returned. I can handle most variations of IBM PC and CP/M disks in 3.5" and 5.25" size but please process your words in some popular word-processing format, ideally as an ASCII or WordStar file. Through the good offices of **Radio Bygones**, we can handle Amstrad PCW and Macintosh disks, but not BBC format. If in doubt please ring first on 0604-844130. Thanks. You can now also fax your letters, ads and articles on 0604-821647.

BACK NUMBERS

All stocks of back issues have been sold now, with the exception of very recent issues (£3 each post-paid) and the volume 1 reprint (still available at £5 post-paid).

FAQ FILES

FAQs are frequently asked questions, so we are keeping two files of FAQs and their answers ready for printing out on request for readers. These files will be updated as new information comes in. These two files are already quite lengthy and contain material already published, so it would not be fair on established subscribers to reprint them in the magazine. FAQ file 1 runs to 24 pages and covers general points about old TV and how to get old television sets working again. FAQ file 2 is a reprint on all the articles on test card music and ITV station ident themes; it covers 11 pages. FAQ file 1 costs £2.50 and file 2 costs £1.50 (both post paid). These prices cover just the cost of copying and postage.

WOULD YOU LIKE YOUR OWN COPY OF 405 ALIVE?

Perhaps you are reading a friend's copy - now you can't wait to receive your own copy four times a year. Send a cheque for £13 (inland), Eurocheque for £14 (abroad) made out to Andrew Emmerson or \$25 cash (world air mail), which will pay for a year's subscription (four issues). There is a 5 per cent surcharge for credit card transactions. Our address is 71 Falcutt Way, Northampton, NN2 8PH.

EXCHANGE PUBLICATIONS

You may wish to contact the following allied interest groups and publications (please send SAE with all enquiries).

BRITISH VINTAGE WIRELESS SOCIETY: Gerald Wells, Vintage Wireless Museum, 23 Rosendale Road, London, SE21 8DS.

VINTAGE RADIO CIRCLE: Geoff Williams, 28 Barton Lane, Cirencester, Glos., GL7 2EB.

BRITISH AMATEUR TELEVISION CLUB: Dave Lawton GOANO, Grenehurst, Pinewood Road, High Wycombe, Bucks., HP12 4DD.

NARROW BANDWIDTH TV ASSOCIATION: Mr Doug Pitt, 1 Burnwood Drive, Wollaton, Nottingham, NG8 2DJ.

TEST CARD CIRCLE (TV trade test transmissions and test card music): Stuart Montgomery, 2 Henderson Row, Edinburgh, EH3 5DS.

IRISH VINTAGE RADIO & SOUND SOCIETY: Henry Moore, 9 Auburn Close, Killiney, Co. Dublin.

RADIO BYGONES (vintage radio technology): 9 Wetherby Close, Broadstone, Dorset, BH18 8JB.

THE RADIOPHILE (vintage radio): "Larkhill", Newport Road, Woodseaves, Stafford, ST20 0NP.

TELERADIO NEWS (current radio and TV trasnmmitter news, long-distance reception): 7 Epping Close, Derby, DE3 4HR.

TUNE INTO YESTERDAY (Old-Time Radio Show Collectors Association): 4 Prospect Terrace, Farsley, Leeds, LS28 5ES.

VINTAGE LIGHT MUSIC SOCIETY: 4 Harvest Bank Road, West Wickham, Kent, BR4 9DJ.

ROBERT FARNON SOCIETY (also light music): David Ades, Stone Gables, Upton Lane, Seavington St. Michael, Ilminster, Somerset, TA19 0PZ.

MEMORY LANE (78rpm-era popular music): Ray Pallett, 226 Station Road, Leigh-on-Sea, Essex, SS9 3BS.

IN TUNE (music of the years 1935-1960): Colin Morgan, 12 Caer Gofaint, Groes, Denbigh, Clwyd, LL15 5YT.

PROJECTED PICTURE TRUST (cinema history): Harrold Brown, 2 Eleanor Gardens, Aylesbury, Bucks..

VINTAGE FILM CIRCLE: Alex Woolliams, 11 Norton Road, Knowle, Bristol, BS4 2EZ.

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